

Basement
Stacks

THE NATIONAL Provisioner

*THE MAGAZINE OF THE
Meat Packing and Allied Industries*

Volume 91

JULY 21, 1934

Number 3

The FIRST MAJOR IMPROVEMENT in RENDERING EQUIPMENT

The LOWRY Circulating Rendering System is entirely new and radically different. It uses *new* principles and methods of operation and is a *major improvement* in rendering equipment.

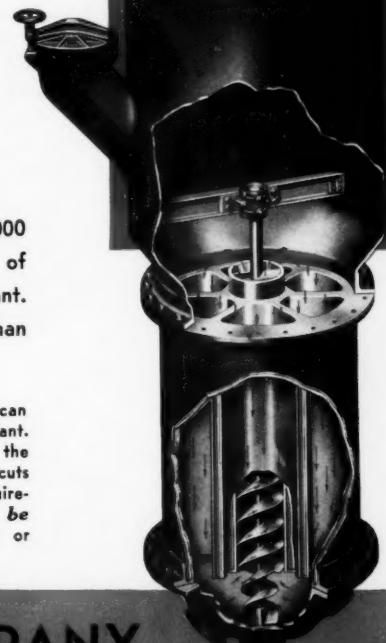
Rendering time can be cut to two and one-half hours. Rendering temperature is reduced to 220 degrees or less! Only 1 to 5 lbs. steam pressure is required. Scorching of product is impossible. Fats and cracklings are improved in quality and command higher selling prices.

The LOWRY Circulating Rendering System is ideal for both *edible and inedible rendering*. Units are available with capacities ranging from 3,000 to 20,000 lbs., all identical in principle, results, and economies of operation. There is a LOWRY Unit to fit every plant. LOWRY Circulating Rendering Units *cost no more* than ordinary rendering equipment of the same capacity.

The LOWRY Circulating Rendering System can be profitably installed in practically any plant. It offers dividends up to 25% and 35% on the investment; guarantees superior results; cuts time, power, maintenance and steam requirements. It gives results that *cannot be approached* by any other equipment or method!

Write
FOR
DETAILS

The
LOWRY
CIRCULATING
RENDERING UNIT



DARLING & COMPANY
4201 S. Ashland Ave.
Chicago, Illinois

Your Stuffing Problems are Over

—when you install the improved

"BUFFALO" Air Stuffer

Equipped with patented leakproof Superior Piston.

Will not leak air, meat or water. Piston is adjustable to take up wear.

Evenly balanced arch. Improved, accident-proof safety ring. Semi-steel cylinder with smoothly polished interior.



THIS machine is sturdily built of highest grade materials. It is most convenient to operate, producing sausage of finest appearance with a maximum of economy in labor and casing costs.

Made in 5 sizes—100 lbs. to 500 lbs. capacity. Air or hydraulic.

A Few Expressions About "BUFFALO" Stuffers:

We are very well pleased with the 500 lb. "BUFFALO" Stuffer, as we haven't had any trouble with it, and will gladly recommend it to anyone in the market for a stuffer.

CHRISTMAN SAUSAGE CO.,
Minneapolis, Minn.

We are more than pleased with our "BUFFALO" Stuffer. Our sausage foreman says his stuffing problems are over, as the new stuffer is working beyond his expectations.

EDWARD HAHN,
Johnston, Pa.

On July 31st, 1928, it was our pleasure to forward to you a report covering the operation of the "BUFFALO" Air Stuffer which we had purchased a short time prior to that date.

The Stuffer is still in operation rendering the same efficient service. It has truly proven a splendid piece of equipment, and we are very happy to recommend it.

COAST PACKING COMPANY,
Los Angeles, Calif.

JOHN E. SMITH'S SONS CO.

BUFFALO, N.Y., U.S.A.

Manufacturers of "BUFFALO" Sausage Machines and Packing House Equipment



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Western Office: 1316 E. Slauson Ave., Los Angeles, California

Canadian Office: 189 Church St., Toronto, Ontario



"WEAR-EVER" ALUMINUM *protects meat color, taste, quality*

New meat
spreading pan
23 $\frac{3}{4}$ " x 35 $\frac{1}{2}$ "

LASTS INDEFINITELY • COST LESS
THAN ANYTHING COMPARABLE

"Wear-Ever" Aluminum resists meat acids and corrosion. It is sanitary, clean, easy to keep clean. The special utensils for packers are made of heavy gauge, hard, wrought, dense Aluminum. Seamless...strong...durable...lasting!

And all these qualities last for life! For Aluminum will never need tinning. It has the same glass-like purity all the way through.

Shown at the left are the new standardized meat-spreading pan and a deep trimming pot. "Wear-Ever" also makes various sizes of tubs, steam kettles for processing and baking, meat loaf pans...and a multitude of other items for packing houses.

Prove the money-saving, better-product qualities of "Wear-Ever" Aluminum for yourself by ordering samples and trying them out. If you do not have our complete catalog, write THE ALUMINUM COOKING UTENSIL CO., Desk G-470, 11th St., New Kensington, Pa.



EVERYTHING IN
ALUMINUM
FOR THE
PACKING HOUSE



"Wear-Ever"
ALUMINUM COOKING UTENSILS
THE STANDARD: MADE OF THICK, HARD SHEET ALUMINUM

The National Provisioner

The Magazine of the
Meat Packing and Allied Industries

Volume 91

July 21, 1934

Number 3



Member



Audit Bureau of Circulations
Associated Business Papers

Official Organ Institute of American
Meat Packers.

Published weekly at 407 So. Dearborn
St., Chicago, Ill., by the National
Provisioner, Inc.

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Yearly Subscription: U. S., \$3.00;
Canada, \$6.50 (includes duty); foreign
countries in postal union, \$5.00.
Single copies, 25 cents.

Copyright 1934 by The National
Provisioner, Inc. Trade Mark regis-
tered in U. S. Patent Office. Entered
as second-class matter, Oct. 8, 1919,
at the post office at Chicago, Ill.,
under act of March 3, 1879.

Daily Market Service (Mail and Wire)

"THE NATIONAL PROVISIONER
DAILY MARKET SERVICE" reports
daily market transactions and
prices on provisions, lard, tal-
lows and greases, sausage ma-
terials, hides, cottonseed oil,
Chicago hog markets, etc.

For information on rates and
service address The National
Provisioner Daily Market Serv-
ice, 407 S. Dearborn St., Chicago.

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HAM BOILING PROFITS

depend on equipment!



ADELmann
NIROSTA
(Stainless)
Steel

ADELmann HAM BOILER

ADELmann WASHER

Economical,
efficient.
Cleans ham
boilers quickly,
easily,
cheaply.
Cleans even
neglected
boilers.



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Automatically
applies correct
pressure to re-
tainers. In-
sures perfect,
solid product.
Speeds pro-
duction!



WHY USE OBSOLETE RETAINERS?

Trade in your worn or obsolete retainers on new, modern ADELmann Ham Boilers and assure maximum profit from the boiled ham season. Liberal trade-in schedules make it *profitable!*

ADELmann Ham Boilers are made of Cast Aluminum, Tinned Steel, Nirosta Metal and Monel Metal—the most complete line available. Special boilers or containers to meet individual requirements, made of Cast Aluminum in lots of fifty or more.

ALL MODERN FEATURES

ADELmann Ham Boilers use *all modern features* to insure low operating cost and maximum profit. The hams they produce sell consistently at a price premium because of fine flavor, perfect appearance and high quality.

ADELmann Ham Boilers are sturdily built to insure long life. They actually *pay for themselves* because they last longer, perform better, are easy to clean, and save on shrinkage.

The close-fitting ADELmann cover is self-sealing! Hams cook in their own juice, thus minimizing shrink. Elliptical yielding springs distribute their pressure over a wide area, eliminate cover tilting, and *allow for expansion and contraction* during process. A well-molded, perfect product is the result.

Use ADELmann Ham Boilers—"The Kind Your Ham Makers Prefer"—and obtain *maximum profits* from the boiled ham season.

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Quality Counts!

Dependable Selection
Uniform Quality
Prompt Service

Armour's
BEEF - HOG - SHEEP
CASINGS

Always the Best

ARMOUR  COMPANY

CHICAGO

THE NATIONAL Provisioner

THE MAGAZINE OF THE
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Shrinkage in Figuring Smoked Meat Costs

AN EDITORIAL

WHEN a packer figures the cost of one of his products he must include not only the expenses he pays out in cash, but also the invisible costs which result from changes in amount of product he will ultimately be able to sell.

This invisible cost — the cost of weight losses in processes like smoking and cooking — becomes particularly important in periods when prices have been advancing.

If 100 lbs. of sweet pickle hams put into the smokehouse produced 100 lbs. of smoked meat ready for sale, cost figuring would consist merely in taking the current price of the sweet pickle product and adding the cost per cwt. of smoking, wrapping, selling, etc.

As a matter of fact, however, cost figuring must begin with an allowance for cost per cwt. of loss in weight—including not only shrinkage during the smoking operation, but also additional shrinkage taking place during hanging, shipping, delivering, etc.

Ordinary operating expenses can be figured as

so much per cwt. of product handled, and the expense will not change greatly if wage rates and other items remain fairly constant and volume does not deviate greatly from normal. *Cost of shrinkage, however, will change whenever price of the raw material changes* — and the difference in final cost may be a very substantial one.

The table on the next page gives the cost per cwt. of percentages of weight loss at various levels of product prices.

From this table it will be seen that while this shrinkage cost amounts to only 26 cents per cwt. on a \$4.00 product shrinking 6 per cent, the cost is \$3.81 per cwt. on a \$20.00 product shrinking 16 per cent. The difference between these extremes is over 3½ cents per pound. No one can afford to miscalculate his costs by anything remotely approaching that amount. With this table CASUAL IMPRESSIONS as to cost differentials on smoking shrinkage's may be checked with ACTUAL ALLOWANCES necessary to cover this cost item.

Know Your Costs

Shrinkage in smoking or cooking meats is a cost item that cannot be overlooked.

Do you figure hanging and shipping shrinkage, as well as smoking or cooking shrink?

Did you know that SHRINKAGE COST CHANGES WHENEVER RAW MATERIAL PRICE CHANGES?

If you want to figure right, read this article and study the table on the next page.

This is the second of a series of studies on COST FIGURING. The first, in the issue of June 9, showed how to figure "Shrinkage on Boiled Hams."

Extra copies of either of these tables may be had upon application to THE NATIONAL PROVISIONER, Chicago, Ill.

HOW TO FIGURE COST OF SHRINKAGE ON SMOKED MEATS

Amount per cwt. which must be added to cover cost of weight losses in converting sweet pickle pork products into smoked pork items.
The table may be used in figuring the costs for hams, bacon, picnics, butts, or any smoked meat, as will be noted from the explanation.*

Market Price per cwt. of Standard S. P. Product.	Shrinkage										
	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%
\$ 4.00	\$0.26	\$0.30	\$0.35	\$0.40	\$0.44	\$0.49	\$0.55	\$0.60	\$0.65	\$0.71	\$0.76
4.25	.27	.32	.37	.42	.47	.53	.58	.64	.69	.75	.81
4.50	.29	.34	.39	.45	.50	.56	.61	.67	.73	.79	.86
4.75	.30	.36	.41	.47	.53	.59	.65	.71	.77	.84	.90
5.00	.32	.38	.43	.49	.56	.62	.68	.75	.81	.88	.95
5.25	.34	.40	.46	.52	.58	.65	.72	.78	.85	.93	1.00
5.50	.35	.41	.48	.54	.61	.68	.75	.82	.90	.97	1.04
5.75	.37	.43	.50	.57	.64	.71	.78	.86	.94	1.01	1.09
6.00	.38	.45	.52	.59	.67	.74	.82	.90	.98	1.06	1.14
6.25	.40	.47	.54	.62	.70	.77	.85	.93	1.02	1.10	1.19
6.50	.42	.49	.57	.64	.72	.80	.89	.97	1.06	1.15	1.24
6.75	.43	.51	.59	.67	.75	.83	.92	1.01	1.10	1.19	1.29
7.00	.45	.53	.61	.69	.78	.87	.95	1.05	1.14	1.24	1.30
7.25	.46	.55	.63	.72	.81	.90	.99	1.08	1.18	1.28	1.38
7.50	.48	.56	.65	.74	.83	.93	1.02	1.12	1.22	1.32	1.43
7.75	.50	.58	.67	.77	.86	.96	1.06	1.16	1.26	1.37	1.48
8.00	.51	.60	.70	.79	.89	.99	1.09	1.20	1.30	1.41	1.52
8.25	.53	.62	.72	.82	.92	1.02	1.13	1.23	1.34	1.46	1.57
8.50	.54	.64	.74	.84	.95	1.05	1.16	1.27	1.38	1.50	1.62
8.75	.56	.66	.76	.87	.97	1.08	1.19	1.31	1.42	1.54	1.67
9.00	.58	.68	.78	.89	1.00	1.11	1.23	1.35	1.47	1.59	1.71
9.25	.59	.70	.80	.91	1.03	1.14	1.26	1.38	1.51	1.63	1.76
9.50	.61	.72	.83	.94	1.05	1.17	1.30	1.42	1.55	1.68	1.81
9.75	.62	.73	.85	.96	1.08	1.21	1.33	1.46	1.59	1.72	1.86
10.00	.64	.75	.87	.99	1.11	1.24	1.36	1.50	1.63	1.77	1.91
10.25	.65	.77	.89	1.01	1.14	1.27	1.40	1.53	1.67	1.81	1.95
10.50	.67	.79	.91	1.03	1.17	1.30	1.43	1.57	1.71	1.85	2.00
10.75	.69	.81	.93	1.06	1.20	1.33	1.47	1.61	1.75	1.90	2.05
11.00	.70	.83	.96	1.09	1.22	1.36	1.50	1.64	1.79	1.94	2.10
11.25	.72	.85	.98	1.11	1.25	1.39	1.53	1.68	1.83	1.99	2.14
11.50	.73	.87	1.00	1.13	1.28	1.42	1.57	1.72	1.87	2.03	2.19
11.75	.75	.88	1.02	1.16	1.31	1.45	1.60	1.76	1.91	2.07	2.24
12.00	.77	.90	1.04	1.19	1.33	1.48	1.64	1.79	1.95	2.12	2.29
12.25	.78	.92	1.07	1.21	1.36	1.51	1.67	1.83	1.99	2.16	2.33
12.50	.80	.94	1.09	1.24	1.39	1.55	1.71	1.87	2.04	2.21	2.38
12.75	.81	.96	1.11	1.26	1.42	1.58	1.74	1.91	2.08	2.25	2.43
13.00	.83	.98	1.13	1.29	1.44	1.61	1.77	1.94	2.12	2.29	2.48
13.25	.85	1.00	1.15	1.31	1.47	1.64	1.81	1.98	2.16	2.34	2.52
13.50	.86	1.02	1.17	1.34	1.50	1.67	1.84	2.02	2.20	2.38	2.57
13.75	.88	1.04	1.20	1.36	1.53	1.70	1.88	2.06	2.24	2.43	2.62
14.00	.89	1.05	1.22	1.38	1.56	1.73	1.91	2.09	2.28	2.47	2.67
14.25	.91	1.07	1.24	1.41	1.58	1.76	1.94	2.13	2.32	2.52	2.71
14.50	.93	1.09	1.26	1.43	1.61	1.79	1.98	2.17	2.36	2.56	2.76
14.75	.94	1.11	1.28	1.46	1.64	1.82	2.01	2.21	2.40	2.60	2.81
15.00	.96	1.13	1.30	1.48	1.67	1.85	2.05	2.24	2.44	2.65	2.86
15.25	.97	1.15	1.33	1.51	1.70	1.88	2.08	2.28	2.48	2.69	2.91
15.50	.99	1.17	1.35	1.53	1.72	1.92	2.11	2.32	2.52	2.74	2.95
15.75	1.00	1.19	1.37	1.56	1.75	1.95	2.15	2.35	2.56	2.78	3.00
16.00	1.02	1.20	1.39	1.58	1.78	1.98	2.18	2.39	2.60	2.82	3.05
16.25	1.04	1.22	1.41	1.61	1.81	2.01	2.22	2.43	2.65	2.87	3.10
16.50	1.05	1.24	1.43	1.63	1.83	2.04	2.25	2.47	2.69	2.91	3.14
16.75	1.07	1.26	1.46	1.66	1.86	2.07	2.28	2.50	2.73	2.96	3.19
17.00	1.09	1.28	1.48	1.68	1.89	2.10	2.32	2.54	2.77	3.00	3.24
17.25	1.10	1.30	1.50	1.71	1.92	2.13	2.35	2.58	2.81	3.04	3.29
17.50	1.12	1.32	1.52	1.73	1.95	2.16	2.39	2.62	2.85	3.09	3.33
17.75	1.13	1.34	1.54	1.76	1.97	2.19	2.42	2.65	2.89	3.13	3.39
18.00	1.15	1.36	1.57	1.78	2.00	2.22	2.46	2.69	2.93	3.18	3.43
18.25	1.17	1.37	1.59	1.80	2.03	2.26	2.49	2.73	2.97	3.22	3.48
18.50	1.18	1.39	1.61	1.83	2.06	2.29	2.52	2.77	3.01	3.27	3.52
18.75	1.20	1.41	1.63	1.85	2.09	2.32	2.56	2.80	3.05	3.31	3.57
19.00	1.21	1.43	1.65	1.88	2.11	2.35	2.59	2.84	3.09	3.35	3.62
19.25	1.23	1.45	1.67	1.90	2.14	2.38	2.63	2.88	3.13	3.40	3.67
19.50	1.25	1.47	1.70	1.93	2.17	2.41	2.66	2.92	3.17	3.44	3.71
19.75	1.26	1.49	1.72	1.95	2.20	2.44	2.69	2.95	3.22	3.49	3.76
20.00	1.28	1.51	1.74	1.98	2.22	2.47	2.73	2.99	3.26	3.53	3.81

*EXPLANATION—The left-hand column shows market prices per cwt. of standard S. P. product (hams, picnics, bellies or whatever). Other columns show various percentages of weight loss from shrinkage.

From your tests you know your average shrinkage from S. P. to smoked weight on each of these products. Use the column showing that percentage, and the dollar figure in that column opposite the market price of S. P. product will give you the amount you lose by shrinkage. This should be used in computing cost of the smoked meats.

This is only one cost item. Others to be figured include cost of labor in trucking, unloading, soaking, stringing, hanging smoking and branding; also supplies, repairs, plant overhead, wrapping, packing, loading, delivery, selling and administrative expense, and profit.

Telling the Story of Meat

I—Nutrition and Research

First of a series of high-lights on the efforts of the National Livestock and Meat Board during the past year to promote the interests of the livestock and meat industry.

POSSIBLY never before has there been such a marked appreciation of the close relationship that exists between the right selection of food and the maintenance of good health. Nearly everyone seems to be interested in authentic information which will help in following the rules of proper nutrition.

The subject of nutrition is one of the most important points in the program of the National Live Stock and Meat Board, for scientific facts show that meat is a real leader among foods as a source of essential food elements.

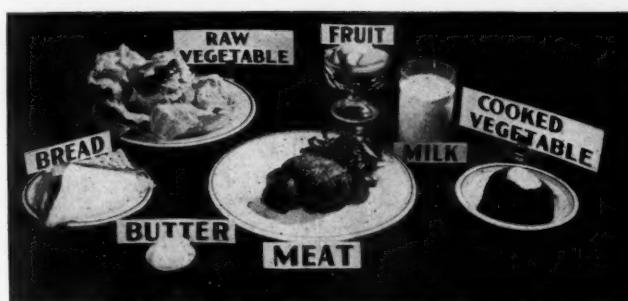
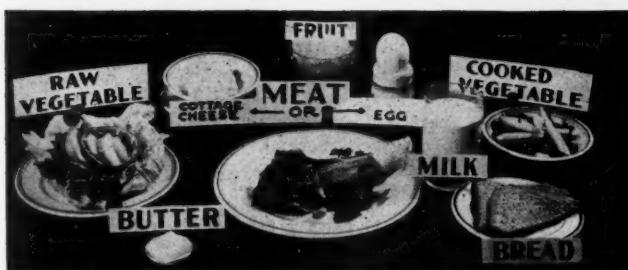
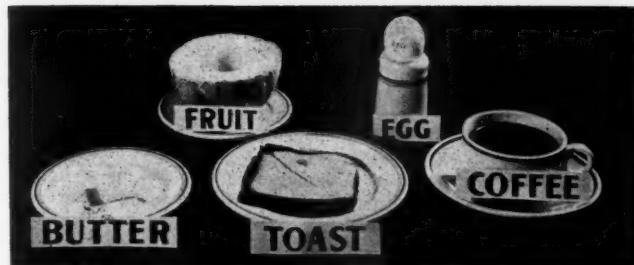
But the Board is not allowing meat to rest upon laurels already won. And it is not overlooking the need for constant effort to guard against and put down groundless anti-meat propaganda which still crops up from time to time. Facts are being placed in the hands of doctors, dentists, and dietitians, whose influ-

TYPICAL WEIGHT LOSS in OBESITY STUDY



AGE 14, HEIGHT 5'3"-WT, AT BEGINNING 243 lbs
PRESENT WT. 187 lbs. LOSS 56 lbs— AVERAGE
WEIGHT FOR HEIGHT AND AGE 114 lbs.

Week ending July 21, 1934



HOW TO REDUCE WEIGHT ON A MEAT DIET.

Here is a typical day's menu in the reducing diet advocated by the National Live Stock and Meat Board, showing liberal servings of lean meat in two of the three meals.

The diet was used successfully in reducing studies carried on with patients differing widely in age and in degree of obesity. It differs from a normal diet only in that it contains fewer calories. Patients who followed this diet stated that they relished their meals, suffered no discomfort, and improved in health during the reducing period.

ence is great in questions of diet. The story is being told direct to the consuming public in plain, every-day language that makes it easy for the layman to understand why it is to his advantage to include liberal amounts of meat in his diet.

Value of Meat in a Reducing Diet.

An important phase of the 1933-4 research program was a study of the use of lean meat in reducing diets. The study was prompted by a discovery made in a Chicago clinic. Patients for whom high protein (meat) diets had been ordered were found to be making the most rapid progress in weight reduction. The reason advanced was that an excess of protein probably stimulated the body to burn the extra weight at a faster rate. The Board decided to sponsor a weight-reduction study using lean meat as the main source of protein. The research was carried on by Dr. Leo K. Campbell of Rush Medical College.

The results show that meat has a very definite place in the reducing diet; that with meat one can reduce comfortably and safely—a ten strike for this food in view of the present-day popularity of weight reduction diets from which meat is so often excluded.

The reducing diets used contained about one-half pound of meat daily. In addition they included raw and cooked vegetables, milk, fruits, cottage cheese, eggs, bread, butter, and black coffee. The

average number of calories in the diet was about 40 to 45 per cent less than in a normal diet.

In the first period of the study each patient was hospitalized every fourth week for thorough examinations, including kidney function tests. These tests have shown no kidney damage whatever or other harmful effects from the diet used.

Lost 45 Pounds in 19 Weeks.

Reports on some of the patients are as follows: A fourteen-year-old girl who should have weighed 114 pounds, actually weighed 243 pounds. In 19 weeks she lost 45 pounds.

A patient 27 years old, weighing about 70 pounds in excess of normal, lost 70 pounds in nine months.

A woman 51 years of age, 26 pounds

section of Chicago. Complete physical examinations were given. Histories of the diets of the children were secured. Examinations showed that all but four of the 55 were anemic. In this condition there is an inadequate supply of the coloring matter which carries oxygen to the blood, a lack of red blood cells or both. The condition is usually due to an insufficiency of iron in the diet. The histories of these children showed that none had been receiving an adequate supply of meat.

The children were divided into two groups for this study, the division being made on the basis of physical condition, social histories and amounts of meat eaten at home. Both groups received a hot lunch at school. One group was given a dish containing meat, the other a dish with no meat. The lunches,

contact with thousands of doctors and other professional groups by meeting them at their conventions. Such contacts have made it very clear that these professional men and women are greatly interested in the information on meat which the Board has to offer. Major events at which the Board maintained booths during the year were the conventions of the American Dental Association, the American Dietetic Association, the Chicago Dental Society and the American Medical Association.

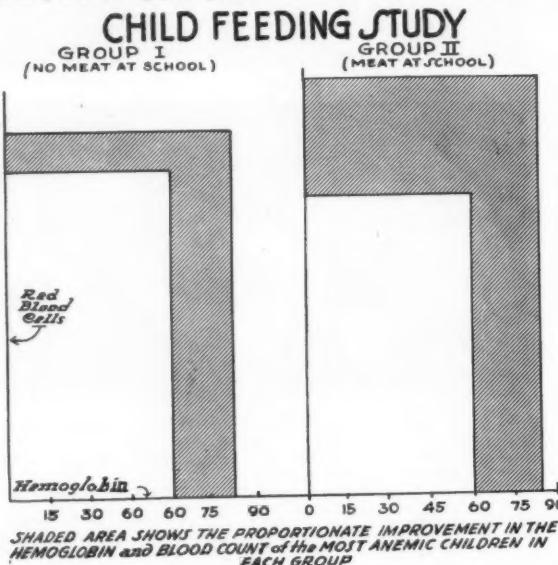
Food Value Charts.

Special literature on the subject of meat in nutrition has been prepared for both professional groups and the layman. This includes such material as Food Value Charts, dental folders which show the value of meat in maintaining strong, healthy teeth, a folder explaining the place of meat in the diet of expectant mothers, etc.

The Food Value Charts, carrying the seal of indorsement of the American Medical Association, are looked upon as one of the most outstanding pieces of educational material ever published in the interests of meat. By showing the relative amounts of the different food elements in average servings of meat and other common foods, the fact is brought out forcefully that meat is a leader among the foods we eat. More than 145,000 sets of these charts were required to fill requests received during the year, largely from educational institutions and professional groups.

The widespread demand for such information from all parts of the United States and even from a number of foreign countries is striking evidence of the interest in the subject of meat and its relation to health.

Meat investigations conducted by the Board will be the next subject discussed in this series.



overweight, reached her desired weight by losing 3½ pounds per week for seven weeks.

Another woman, 29 years old, reached her desired weight of 124 pounds, losing 11 pounds in one month. A man of 60 lost 25½ pounds in three months.

All patients stated that they not only reduced with comfort, but actually felt better at the close of the diet period.

Meat in Child's Diet.

The Board inaugurated a Child Feeding Study under the supervision of Dr. Robert S. Herzog of the Northwestern University Medical School. The object of the study was to obtain more information relative to the need for meat in the child's diet. The fact that surveys have revealed a prevailing condition of malnutrition among children made the study of added significance.

Fifty-five children were selected for the study at a grammar school in a poor

however, all contained equal numbers of calories.

It was found that in the case of those given the diet including meat the degree of anemia was reduced. The most marked improvement was noted in those children who had extra helpings of meat at school and the most meat at home. On the other hand, in those receiving the meatless diet there was an increase in anemia.

Nutrition Studies with Animals.

In addition to the research involving human beings, nutrition studies are in progress in which experimental animals are used as subjects. For example, at the University of Minnesota Dr. George O. Burr and W. R. Brown are studying the value of lard in the diet. At the University of Iowa Dr. Matill and Mr. Seegers are studying the Nutritive Value of Animal Tissues for Growth, Reproduction and Lactation.

The Board has established personal

POULTRY REDUCTION LIGHT.

Effects of the drought are reported to have been less noticeable on poultry and egg production than on livestock production. As a result, the reduction in the number of chickens on farms July 1 is estimated at only 10 per cent less than a year earlier. A sharp curtailment in market supplies of poultry and a reduction in production of eggs during the next twelve months are expected, the Bureau of Agricultural Economics states. Should prices of eggs be favorable to farmers the remainder of this year, more layers would be retained and there would be only a slight decrease in total egg production. However, even this would be 5 to 10 per cent less than the five-year average. Cold storage holdings of case eggs in ten states on July 10 were 8 per cent less than a year earlier but 5 per cent more than the average of recent years.

Should the Meat Packer Can Dog Food?

Survey of a 100 Million Dollar Market Which Is Already Second Largest User of Tin Containers

WHAT are the opportunities for the profitable production of prepared dog food?

This is a question in the minds of many meat packers, judging from inquiries on this subject received by THE NATIONAL PROVISIONER from packers in all sections of the country.

Generally it may be said that the market is large and is growing.

There are between 12 and 15 million dogs in the country. Their numbers have increased rapidly during the past three or four years.

A Hundred Million Dollar Market.

Retail sales of prepared dog foods total between 100 and 130 million dollars yearly, according to a recent comprehensive survey.

Canned dog food manufacturers already are the second largest users of tin containers of any food industry.

There are more than 200 brands of prepared dog foods on the market—of which less than a score are those of meat packers.

Whether or not it would be profitable for a meat packer to engage in the manufacture of prepared dog food is a matter each must decide for himself.

The Packer Must Decide.

One thing is certain: *The packer who produces a dog food to suit dogs and satisfy dog owners has a better chance to succeed than one who regards dog food simply as an outlet for meat plant products.*

In surveying this market (which seems to be a tempting one, judging by the amount of correspondence on the subject coming to the desk of the editor) packers must keep in mind this



THEY MUST BE SATISFIED.

bit of human nature—dog owners often seem to think more of their dogs than they do of themselves!

In other words, a dog food that suits the dog will "repeat." One that he refuses, or that makes him sick, goes into the garbage can!

That is why the packer—if he wants to make dog food—must think of the dog, and not of his offal.

Gave It a Bad Name.

A leading authority on dog food says that of the 200 brands of dog food on the market, a large number have been misrepresented to dog owners. Reaction to such misrepresentation is now evident in a movement among dog owners and kennel clubs, backed by government officials and veterinarians, to distinguish between good and bad dog food.

This same authority is of the opinion that dog food manufacture might well center in the meat industry.

The meat plant is the source of a large proportion of the products entering into the manufacture of dog food. The meat packer has the experience and facilities to produce a quality product, merchandise it efficiently and distribute it economically.

The Packer's Opportunity.

The meat industry, therefore, is in strategic position to gain a considerable portion of the dog food business—if it can make products with due consideration for a dog's nutritional needs.

The opportunity is here. The packer can capitalize on it, or he can "muff" it. Results will depend largely on his production policy.

But what the individual packer wants to know first of all—even before he is ready to work out a formula and plan production—is this: What and where is the market?

Information on the dog food market is available in a market research completed recently by the Major Market Newspapers, Inc., in 102 of the larger cities of the country. In making the survey and determining market facts over 6,000 retail dealers selling prepared dog foods were contacted.

Results of a Market Survey.

Approximately 30 per cent of the people in the United States live in these 102 cities, and about 39 per cent in the counties in which these cities are located. These counties, however, represent 72 per cent of the spending income from industries and 65 per cent of all income, including that from farms.

The primary purpose of the research was—

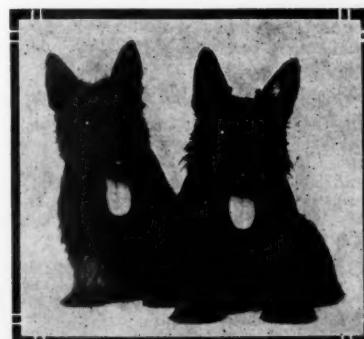
- 1—To determine principal markets for dog foods.
- 2—To estimate size of markets.
- 3—To determine how best to sell them.

Chief Retail Outlets.

There are 10 principal retail outlets for prepared dog food. These, in the order of their importance, are as follows:

- 1—Independent grocery stores.
- 2—Voluntary chain grocery stores.
- 3—Chain grocery stores.
- 4—Independent drug stores.
- 5—Chain drug stores.
- 6—Delicatessens.
- 7—Meat markets.
- 8—Pet stores.
- 9—Department stores.
- 10—Hardware stores.

However, if a packer wants to find the best outlet for his dog food in any



Photos courtesy "Dog World."

particular community he will have to make his own investigations, for buying habits in the city may be different from those that prevail generally. This can be illustrated by an incident:

Must Select Right Channel.

A prominent dog food manufacturer seeking his share of the business in Grand Rapids, Mich., made a merchandising drive and succeeded in getting a good distribution for his product in the grocery stores of the city.

But sales did not total the volume he had a right to expect, in view of the large number of retailers handling his product. The study previously referred to explained the reason. Dog owners in Grand Rapids had acquired the habit of buying dog food not at grocery stores, but at drug stores.

Buying habits there, as revealed by the survey, are shown in Table 1.

TABLE 1.—BUYING HABITS IN GRAND RAPIDS

Type of store.	Av. No. cans of dog food sold per store per week.
Chain drug.....	73.4
Independent drug.....	5.0
Chain grocery.....	4.2
Independent grocery.....	3.6
Meat Markets.....	2.1

The dog food manufacturer previously referred to, armed with the information in Table 1, went after the drug store trade, aimed his advertising to attract drug store customers and entirely changed his sales picture in that particular city.

Here They Patronized Chains.

But had he been going after the Atlanta, Ga., market he would have had to use entirely different tactics. Here the dog owner is more prone to buy prepared food for his pet in the chain grocery store. The situation there is shown in Table 2.

TABLE 2.—BUYING HABITS IN ATLANTA.

Type of store.	Av. No. cans of dog food sold per store per week.
Chain grocery.....	74.4
Independent grocery.....	27.0
Voluntary chain grocery.....	24.6
Delicatessen.....	19.0
Chain drug.....	9.9
Independent drug.....	8.0
Meat markets.....	6.0

Average number of cans of prepared dog food sold per store per week in Atlanta is 26.5.

Thirteen brands were on sale in the city at the time the study was made. Total sales were 1,856 cans weekly, ranging from 746 for the most popular brand to one can weekly for the poorest selling brand.

Sales Per Store High in Brooklyn.

In Brooklyn, N. Y., the chain grocery stores are also the best outlet for prepared dog food, being considerably ahead of any other type of store in average number of cans sold weekly. The situation there is as shown in Table 3.

TABLE 3.—BUYING HABITS IN BROOKLYN.

Type of store.	Av. No. cans of dog food sold per store per week.
Chain grocery.....	43.1
Delicatessen.....	24.1
Voluntary chain store.....	17.8
Independent grocery.....	12.1
Independent drug.....	4.0

Stop! Look! Listen!

Meat packers are eyeing this \$100,000,000 dog food market with interest.

It offers opportunities for the packer, but he must watch his step!

THE NATIONAL PROVISIONER is making a study of this market, and will give its readers the results in a series of articles of which this is the first.

Average week sales of dog food per store per week in Brooklyn are 18.9 cans. Twenty-five brands were on sale in the city, only four or five of which have any considerable distribution.

In Seattle, Wash., the chain drug store is the important outlet for prepared dog food. How sales are made there is shown in Table 4.

TABLE 4.—BUYING HABITS IN SEATTLE.

Type of store.	Av. No. cans of dog food sold per store per week.
Chain drug.....	194.2
Department.....	132.0
Independent.....	67.1
Pet.....	44.1
Voluntary grocery.....	43.4
Ten cent.....	26.6
Independent drug.....	20.8
Delicatessen.....	18.0
Chain grocery.....	2.7

Nineteen different brands of prepared dog food are sold in Seattle, only five of which are bought in any considerable volume.

Where Sales Reach Million Mark.

Sales and merchandising data, similar to that given for Grand Rapids, Atlanta, Brooklyn and Seattle, are available for 98 other large cities of the country.

As a result of this study in these 102 larger cities in the country it was estimated that 48.6 per cent of the prepared dog food produced is sold in these communities. In ten of these larger cities retail sales exceeding \$975,000 are made annually, as shown in Table 5.

TABLE 5.—DOG FOOD SALES IN LARGE CITIES.

City.	Retail sales of prepared dog food.
New York.....	\$10,681,400
Chicago.....	4,304,300
Baltimore.....	2,822,400
Philadelphia.....	2,758,700
Detroit.....	2,037,200
Los Angeles.....	1,051,400
Boston.....	1,487,300
Cleveland.....	1,166,300
San Francisco.....	997,800
St. Louis.....	987,800

Total retail sales for the 102 major cities of the country are placed at \$48,608,700. Sales in the cities and counties in which these cities are located are estimated at \$59,178,000.

In other words, approximately one-half of all dog food manufactured,



HOW ONE PACKER ADVERTISES DOG FOOD.

perhaps a little less, is sold in the 102 larger cities and the country immediately surrounding them.

Leading brands of prepared dog food, listed in the order of their importance in the various geographical divisions of the country, are included in the survey.

Customers Buy by Brand Name.

How do customers buy dog food? Do they ask for it by brand names? How many cans are bought at one time?

Answers to these questions are of interest to the meat packer planning to manufacture or manufacturing dog food.

In Atlanta, Ga., from 70 to 100 per cent of customers buy dog food by brand name. Of the independent grocers interviewed in Albany, N. Y., one said 10 per cent of the customers ask for dog food by brand name; one said 25 per cent, one said 40 per cent, three said 50 per cent, one said 90 per cent and one said 100 per cent.

Of the voluntary chain grocers in Albany, six said 50 per cent of the customers buy dog food by brand, three said 75 per cent and 6 said 100 per cent.

In Seattle, Wash., 31 druggists said 90 per cent of the dog food sold is asked for by brand name. One department store in that city said 50 per cent and one said 85 per cent.

Some stores carry only a single brand of dog food, others may handle a number of brands. Chain stores generally push favored brands.

Customers usually buy more than one can at a time, when a price inducement encourages quantity purchases.

Good Merchandising Needed.

A study of sales of dog food in various cities shows that while some manufacturers are apparently very successful in securing distribution, they are not so well able to build large consumer demand for their products. On the other hand, brands sold in fewer stores often outsell those with a wider distribution, indicating more success in building consumer demand than in selling retailers.

No doubt quality of the product is an influential factor in each case.

Many brands of prepared dog food have not, as yet, attained either wide distribution or large consumer demand. Merchandising of the product, therefore, is something the packer must take into consideration. In every territory there are some brands that are well established, and in practically no community would a packer be able to get his share of sales without probably some intensive merchandising effort.

Points to Remember.

Three things seem certain.

1—The packer must have a product that will "repeat," otherwise he cannot hope to build profitable volume.

2—He must build consumer demand for his product.

3—His distribution must be wide enough so that customers can purchase it without inconvenience.

This is the first of a series of articles on prepared dog food—the market for it, what it must be to become popular, how to produce it and how it is being merchandised. Another will appear in an early issue of THE NATIONAL PROVISIONER.

Government Meat Canning Plans

PLANS to establish small meat canneries throughout the emergency drought areas are under consideration by federal and state relief administrations. Some 400 to 500 canning units, operated as state work relief projects under the agricultural extension divisions, are being considered. This it is claimed would make possible more rapid utilization of cattle in distress areas, and the assumption is that the money to operate these plants would come from federal sources.

Precedent for this already has been set in Texas, where some 15 meat canning plants have operated in state relief work. Federal and state extension agencies give technical direction and necessary training and supervision of workers.

Meat canning projects as planned are small and highly localized, and are designed not only to furnish work relief but to utilize cattle, calves and sheep from nearby sections and thus avoid much of the cost of distribution. It is said that commercial canning plants are working to capacity on relief cattle, and if these local projects were active it would make possible considerable increases in government purchases of these animals.

Questions arising in connection with such an undertaking are whether the government will be able to undertake operations on a considerable scale without disturbing commercial channels, and whether once in the business the government will withdraw when the emergency fades.

NEW CANNED BEEF BIDS.

New bids on canned beef and chilled veal have been invited by the Federal Surplus Relief Corporation under schedule 78, to be opened July 26. The schedule is similar to No. 69, under which slaughtering, chilling, freezing and canning operations are now being conducted.

Awards will be made under the new schedule for a period of one month of 30 days. It is pointed out that the number of cattle that will become available for processing is not known, this depending largely upon the condition of the animals as they are found in the drought region. "They may be many or few," the schedule states. "Awards must be based, however, upon the indicated capacity of each plant with a view to taking care of the maximum number of cattle that might become available. It will be understood that cattle actually available in any location will be apportioned to the contractors

in the vicinity by the B. A. I. inspector in charge at the yards."

Should there be more cattle than the ability of the bidding plants can handle, the beef will be frozen in quarters or as boned beef. It is understood that the corporation may suspend or curtail the contracts if the supply of cattle is less than that required to furnish all contractors in accordance with the terms of the awards.

The new schedule provides that the meat from the entire carcass is to be used "with the exception of shanks, hanging tenders, skirts, head meat, tenderloins, kidneys and kidney fat." The previous schedule made all of these exceptions and in addition "scrap

meat." It is assumed that under Schedule 78 the scrap meat is to be canned also.

DROUGHT CATTLE PURCHASES.

Cattle purchased under drought relief measures totaled some 851,111 head on July 11. This is 35 per cent of the total inventory of cattle on the 70,000 farms in 14 states where cattle were sold voluntarily under the drought relief plan. The total cattle population in the 14 drought states, including dairy cattle, was estimated on January 1, 1934, at 30,496,000 head, which is a little less than half cattle population.

More than \$2,750,000 has been paid for these cattle, including benefit and purchase payments. Benefit payments to the close of business July 11 were \$898,850; purchase payments, \$1,658,201.

Packers' Programs on the Air

Carstens Packing Company

Dramatizes the Local Barber Shop

IN EVERY rural community the local barber shop is the clearing house for every form of news and gossip that floats about the county. Sometimes it is not only the clearing house; sometimes it's where the trouble starts.

But there is a great deal of homely philosophy in these barber shop meetings. Pathos has its share in the conversation, but more often humor of the side-splitting variety is the thing that strikes the keynote.

Realizing this, the Carstens Packing Company of Tacoma, Portland, Seattle and Spokane have chosen this background for radio broadcasts presenting their line of meat products.

The program was skillfully arranged by president W. H. Wells with the idea of creating good will for the Carstens products, and apparently it has succeeded in putting audiences in a receptive mood. Mr. Wells believes the judicious use of the sponsor's name by repetition carries the message more effectively than straight "commercials" could. There is no other advertising of products on this broadcast.

The main characters are Grandpa Prouty, deaf octogenarian; Chet Rochester, fearless guardian of the law; Jeff Larrabee, loquacious village barber, proprietor of the Elite Barber Shop located in the village of Carstens Corners; Henry Carstens, proprietor of the Carstens House, main and only hostelry; his wife, Sophie; Aunt Sarah, village gossip; Mrs. J. Worthington Bangs, richest woman in Watkins County; Budge Talbot, postmaster, etc.

The program, which will run for six months, is broadcast from KOMO in Seattle, KGW in Portland, and KHQ in Spokane, using an NBC hookup. It lasts for thirty minutes. Burton James and the Seattle Repertory Players enact the comedy-drama.



AT CARSTENS CORNERS.

These are some of the main characters in the Carstens Packing Company broadcast called "Carstens' Corners." Grandpa Prouty reads the Police Gazette; Jeff Larrabee, the barber, shaves Henry Carstens, the hotel proprietor. In the background is Chet Rochester, "fearless guardian of the law."

Practical Points for the Trade

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Saving Second Pickle

Is second pickle worth saving and if so how can it be used? This is the question of a small packer, who says:

Editor The National Provisioner:

Quite often we have read articles in your magazine touching upon the subject of boiled second pickle.

We have, however, failed to note any information as to how this pickle is handled. If you have a reprint giving this information we would like to have it; if not, will you furnish through your columns, information on how to handle this pickle and the amount of salt and saltpeter it is necessary to add before it can be used again?

Information has been given from time to time in THE NATIONAL PROVISIONER on methods of handling second pickle. This may be summarized as follows:

After meats are removed from curing pickle the pickle still retains a considerable amount of the curing ingredients. In some companies it is the practice to recover this pickle, sterilize it and add more of the curing materials to bring it up to full strength.

The usual practice is to boil the pickle, filter it through sponges or some other filtering agency, then chill and build it up to the desired strength. To do this accurately a chemical analysis is desirable, in order to know just how much of each ingredient should be added.

Equipment for recovering and remaking this second pickle consists of vats for boiling, filtering apparatus, double pipe coolers and a storage vat. The vats for boiling are used for collecting and storing the used pickle until enough has been accumulated to process it. The vats should not be too large, as this pickle must be worked up without too much delay.

Wooden vats of about 1,500 gallons capacity are commonly used. They are equipped with 2 in. steam coils, set far enough away from the sides to permit of the vat being cleaned with ease. It is desirable that the steam coils have a cold water connection for use in chilling the pickle after it has been boiled. There must be enough of the coil to insure rapid heating as well as rapid chilling.

From this vat the pickle is run through the filtering apparatus into a storage vat, after it has been boiled and cooled down. Here it is settled and removed for use by means of a siphon which is set 6 in. from the bottom of the vat so no settling will be drawn off.

Rapid handling of this second pickle is desirable, as it often contains organ-

isms which have a tendency to destroy the nitrite in the pickle before it can be used again. This is true whether nitrate or nitrite is used in the formula. If nitrate is used, nitrite forms out of this during the period of curing, and it is the nitrite which remains in the pickle. Rapid boiling and quick chilling overcome this trouble to a considerable degree where such organisms are present.

Most second pickle contains about two-thirds of the salt and sugar and one-half of the nitrate used in the original pickle. It is necessary, therefore, to add one-third of the original amount of salt and of sugar and one-half of the nitrate used in the formula, to bring it up to the strength of the original pickle.

Some packers do not advocate the use of this second pickle for curing best grades of meat, although if quickly and carefully handled it is a good pickle. It is used extensively in the curing of meats for sausage, by pouring $\frac{1}{2}$ gallon or a gallon of it over the top of the tierce in which the meats are being cured. This is done before the pickle is brought up to its full strength. Second ham pickle used in curing sausage meat is thought by some manufacturers to add a nice flavor to the cured trimmings.

Canadian Style Bacon

Consumer demand for lean bacon has had a tendency to popularize the type of bacon made extensively in Canada, known in this country as "Canadian style" bacon.

This product is made from the loin rather than the belly, as in American bacon. It is stuffed either in beef bungs or bung-size cellulose casings and smoked. It may be frozen for a certain length of time before curing, or if fresh unfrozen loins are cured smoking must be so done as to reach an inside temperature of 137 degs. in the stuffed product.

Instructions for making "Canadian style" bacon have been prepared by THE NATIONAL PROVISIONER and subscribers can secure copy by sending 10c in stamps with request on the attached coupon.

The National Provisioner,
407 So. Dearborn St., Chicago, Ill.
Please send me instructions on
"Canadian style" bacon.

Name.....

Street.....

City.....

Enclosed find 10c in stamps.

Packing Frankfurters

Should frankfurters be packed the same day they are made? A sausage manufacturer writes:

Editor The National Provisioner:

Please inform us whether or not it is proper to pack frankfurters the same day they are made.

It is all right to pack frankfurters the same day they are made, provided they are thoroughly cooled before they are packed. The important thing is to keep them from sweating, as this encourages the formation of mould.

However, frankfurters should not be packed until they are to be shipped. It is not a good plan to pack sausages some time in advance and hold them in the containers. This is particularly true in warm weather. They should not be too cold when they are packed. Smoked cooked sausages should be held in a storage or sales room at a temperature of around 50 degs., or even as high as 55 degs. If sausages are taken out of a 40 deg. cooler and packed in containers they are pretty sure to sweat, especially at this season of the year.

Two Grades of Bologna

A packer who wants to make two grades of bologna asks for some information. He says:

Editor The National Provisioner:

We want to make two grades of bologna and wonder just how these two grades should differ. We have an outlet for a reasonable quantity of high priced product but must have a less expensive one as well.

The chief difference in the two grades of bologna would be in the meats used. The methods of handling and manufacture are the same. Less expensive meats can be used in the second grade but they should be fresh and of unquestioned quality. There is no reason why a second grade sausage should not be a very good sausage, except that the meats included are not of as high quality.

For a first grade bologna only good beef chuck and fresh regular pork trimmings should be used—about 65 to 70 per cent of the beef and 35 to 30 per cent of the pork. For the second grade bologna, bull meat, beef hearts and tripe can be used for the meat in the formula along with fresh regular pork trimmings or frozen pork trimmings. In each 100 lb. batch about 10 lbs. of hearts, and 15 lbs. of tripe along with the bull meat would constitute the beef in the formula.

The National Provisioner

Refrigeration and Frozen Foods

Refrigeration Piping

How to Save by Modernizing the Layout in the Plant

By R. C. DOREMUS*

PIPING is used in large quantities in the packinghouse refrigerating plant. It represents a considerable sum in initial capital investment cost, as well as in operation and maintenance.

It must be used carefully in order that maximum performance be obtained.

If too much piping is used in any part of the plant equipment, money will be squandered. If too little piping is used, operations suffer through lack of balance in capacity or excessive operating costs.

Piping represents such a large part of every refrigeration plant that it deserves intelligent treatment. Modern plants are constructed in the light of recent developments in the art by architects and engineers well versed in this profession. Old plants were often constructed from more or less hastily prepared plans—if any—with little thought given to the engineering possibilities of piping.

Checkup of Piping Pays.

Plants so constructed that have not yet modernized their old equipment still have it on their program—whether listed or not—for the principle of "sur-

*Condensed from "Heating, Piping and Air Conditioning."

vival of the fittest" holds true. A checkup of every plant, no matter when constructed, is advisable.

Piping used in refrigeration plants may be roughly grouped as

1. Piping to form surface, and
2. Piping to act as conduit.

In the first class, pipe is used as so much heat-transfer surface in order to collect heat from the material to be refrigerated and pass it through the pipe wall to the refrigerant within the pipe.

The material to be refrigerated may be solid, fluid, viscous or thin, high- or low-gravity liquid, gas, vapor or air of various specific heats, or what have you. The refrigerant may be water, brine, or some volatile refrigerant.

Calculating Pipe Surface.

Yet, whatever the application, the factors affecting its performance are quite well known and in a new plant may be properly calculated. In an existing plant the piping may be checked to determine how it compares with current piping practice and changes made to make it conform if desirable.

After the heat has been absorbed by the refrigerant, it must be conducted from one piece of equipment to another and finally eliminated from the plant in the condenser water. Most refrigerating fluids must be conserved and recirculated, which demands a definite cycle in closed piping. This piping acts simply as so much conduit to conduct

the fluids from one piece of apparatus to another in the operating cycle.

Amount of pipe surface required for a given tonnage must be carefully matched with the load; the conditions will determine the performance factors to be used. If the problem at hand be one of cooling a cold-storage room with either brine or direct-expansion ammonia, the rates of heat transfer will vary with wetted surface, defrosting, etc., but in general, with the customary heat insulants used, the surface may be determined by reference to the charts shown in Figs. 1 and 2.

Example: What amount of 2-in. brine pipe should be used in a cold-storage cooler measuring 30 by 80 by 11 ft. to maintain 33 degs. Fahr.

$$\text{Volume} = 30 \times 80 \times 11 = 26,400 \text{ cu. ft.}$$

Fig. 1 shows ratio 14:1

$$\text{Pipe} = 26400/14 = 1886 \text{ linear ft. of 2 in.}$$

Example: What would the same condition be for direct expansion ammonia?

Fig. 2 shows a ratio 22:1

$$\text{Pipe} = 26400/22 = 1200 \text{ linear ft. of 2 in.}$$

In case it is desired to use 1½-in. pipe, multiply the 2 in. ratio by 0.70 to determine equivalent amount of pipe surface.

Allow for All Heat Items.

If the process load is very active, due allowance must be made for all items of heat by making a heat balance and computing load on an hourly rate in order to calculate sufficient pipe to match the load. Otherwise the surface will be deficient, and it will be necessary for the plant to operate with a larger temperature head or difference than is economical to produce capacity results.

In any case the surface may be calculated readily from the formula:

$$H = A \times U \times (T_1 - T_2)$$

where

$$H = \text{Total B.t.u. per hour;}$$

$$A = \text{Area of transfer surface;}$$

$$U = \text{Heat transfer factor;}$$

$$T_1 = \text{Temperature of material to be cooled;}$$

$$T_2 = \text{Temperature of refrigerant}$$

Table 1—Square Feet of Direct-Expansion Pipe-Coil Surface in Air Per Ton of Refrigeration Per Day.

Suction Temp. F.	Room Temperatures.					
	-10	0	10	20	30	40
30	480	240	
25	960	320	192
20	480	240	100
15	960	320	182
10	480	240	160	120
5	960	320	182	137
0	480	240	160	107
-5	...	960	320	182	137	88
-10	...	480	240	160	120	80
-15	...	960	320	182	137	88
-20	...	480	240	160	120	96
-25	...	320	192	137	107	88

The above table is calculated using $K = 2.5$ B.t.u./sq. ft./F. diff./hr. For linear ft. of 2-in. pipe, multiply tabulated value by 1.61. For linear ft. of 1½-in. pipe, multiply tabulated value by 2.30.

Table 2—Square Feet of Brine Pipe Coil Surface in Air Per Ton of Refrigeration Per Day.

Brine Temp. F.	Room Temperatures.					
	-10	0	10	20	30	40
30	343
25	685
20	343
15	685
10	343
5	685
0	343
-5	685
-10	343
-15	685
-20	343

The above table is calculated using $K = 3.5$. For linear ft. of 2-in. pipe, multiply tabulated value by 1.61. For linear ft. of 1½-in. pipe, multiply tabulated value by 2.30.

Table 3—Maximum Length in Feet of One Continuous Coil of Ammonia Direct Expansion Room Piping.

Pipe Size In.	Based on average vapor velocity of 1,000 fpm.										
	-27	-20	-15	-10	-5	0	+5	+10	+15	+20	+25
1 lb. 4 fl. bbl.	268	285	334	382	435	485	543	602	675	758	842
1½	318	335	420	463	503	641	718	800	885	901	1118
2	425	523	609	737	853	960	1070	1180	1323	1480	1660
2½	742	785	932	1121	1215	1369	1514	1674	1870	2110	2310
3	900	960	1035	1135	1200	1270	1360	1420	2040	2290	2570
3½	1200	1285	1510	1725	1900	2200	2450	2720	3030	3410	3860

A = Internal area of pipe in sq. in.
Vmax = Maximum velocity of vapor in coil inches per min.
E = Refrigerating effect in B.t.u. per cu. ft.
Td = Temp. difference inside and outside of coil in F.
Smax = Maximum surface of coil in sq. ft.
K = Constant representing safety factor = 0.5.

$$Smax = \left[\frac{E (A \times Vmax)}{1728} \right] \times 60 \times K = \left[\frac{E (A \times Vmax)}{1728} \right] \times 1.13$$

Table 4—Maximum Area of Indirect Brine Coil Surface Per Valve to Maintain 5-F Rise with Average Brine Velocity of 0.75 fps.

Brine Temp. F.	Room Temperatures.									
	-20	-15	-10	-5	0	5	10	15	20	25
30	343
25	685
20	343
15	685
10	343
5	685
0	343
-5	685
-10	343
-15	685
-20	343
-25	685
-30	343

The above table is based on: $K = 3.50$ B.t.u./sq. ft./F. diff./hr.

provided the U value of the surface is known or can be determined.

There are numerous cases where rooms of various temperatures are to be controlled on one refrigerant temperature, which means variations from standard conditions in temperature head. If one case used a 15 degs. Fahr. head it will require twice as much surface as one using a 30 degs. head. Or, conversely, a system may be operating at large temperature heads, whereas with a little revamping and the addition of some surface to a weak point it may be able to build the load with a smaller temperature head.

Cutting Refrigeration Cost.

This means that the compressor can do its work at a higher back pressure at a temperature nearer the plane of the load. Such operation is more efficient in that the compressor handles a larger tonnage at higher back pressure, and hence can handle the load in less time at a saving in power — which is a saving in operating cost.

Table 1 indicates the amount of direct-expansion pipe-coil surface in square feet per ton of refrigeration per day in the case of cooling gravity-circulated air, based on a U factor of 2.5 B.t.u. per sq. ft. per hr. per degree Fahr. of temperature head.

Example: What pipe surface is required to handle a 4-ton load at 10 degs. Fahr. in one room and a 5-ton load in a second room at 30 degs. Fahr., with a suction temperature of -5 degs. Fahr. on an ammonia direct-expansion system?

First room (From Table 1)

$$A = 4 \times 320 = 1280 \text{ sq. ft.} = 1280 \times 1.61 = 2056 \text{ lineal ft. of 2-in. pipe}$$

Second room (From Table 1)

$$A = 5 \times 137 = 685 \text{ sq. ft.} = 685 \times 1.61 = 1100 \text{ lineal ft. of 2-in. pipe.}$$

Note: For any given condition, it is obvious that a larger amount of surface will permit the same tonnage to be operated at a higher suction pressure and temperature or a lower temperature head inasmuch as:

$$H = A \times U \times (T_s - T_b)$$

which is the fundamental heat transfer formula.

Similarly, Table 2 indicates the amount of brine pipe coil surface required in square feet per ton of refrigeration per day based on a U factor of 2.5 B.t.u. per hr. per sq. ft. per degs. Fahr. of temperature head.

Example: What pipe surface is required to handle a 4-ton load in one room at 0 degs. Fahr. and a 4-ton load in another room at 30 degs. Fahr. with -10 degs. Fahr. average brine temperature? The brine supply may be -12.5 degs. Fahr. and the return brine may be -7.5 degs. Fahr. with an average in the coil of -10 degs. Fahr.

First room (From Table 2)

$$A = 4 \times 343 = 1372 \text{ sq. ft.} = 1372 \times 1.61 = 2212 \text{ lineal ft. of 2-in. pipe.}$$

Second room (From Table 2)

$$A = 4 \times 86 = 344 \text{ sq. ft.} = 344 \times 1.61 = 558 \text{ lineal ft. of 2-in. pipe.}$$

Length of Piping per Coil.

In any pipe coil surface, the refrigerant itself has a very definite heat-absorbing capacity, and therefore consideration must be given the length of piping used per coil. In the direct-expansion system, if too much length is used on one feed or expansion valve, the vapor velocities are excessive if saturated, or if not saturated the vapor becomes greatly superheated.

Inasmuch as 2-in. pipe and smaller is generally used for this purpose, it is considered satisfactory to use a 2,000-fpm maximum vapor velocity at the suction end of the coil or an average velocity throughout the coil of 1,000 feet per minute. Table 3 indicates maximum lengths for one continuous coil of direct-expansion ammonia piping based on a 1,000-fpm average vapor velocity.

(Continued on page 26.)

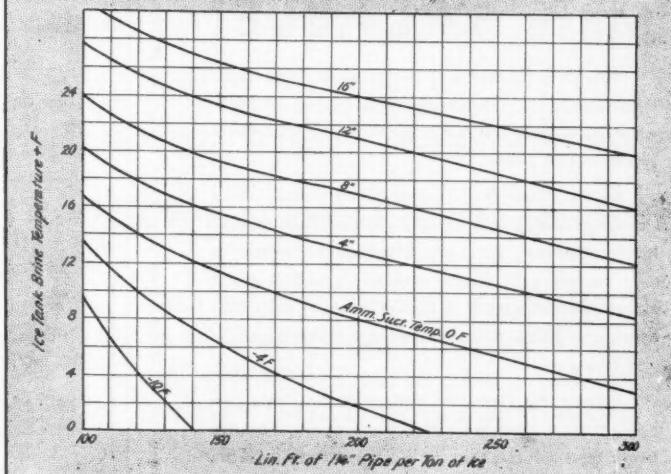
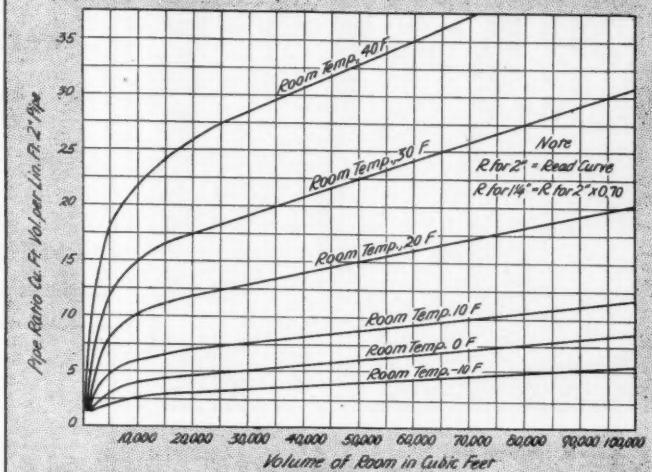
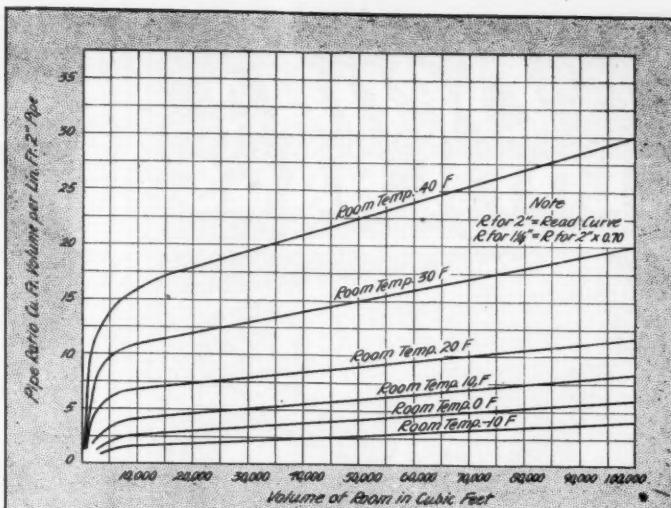


Fig. 1 (top)—Pipe ratios in cubic feet volume per lineal foot of 2-in. pipe for maintaining various temperatures in well insulated rooms by a brine system.

Fig. 2 (center)—Pipe ratios in cubic feet volume per lineal foot of 2-in. pipe for maintaining various temperatures in well insulated rooms by direct expansion system.

Fig. 3 (bottom)—Lineal feet of 1 1/4-in. pipe per ton of ice.

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"THE HOUSE OF STANDARDIZED QUALITY"

A Page for the Sausage Manufacturer

Does It Pay to Do This?

Does It Help Sausage Business to Fool Consumer on Quality?

CAN sausage be made to "sell at a price?"

Will consumers come back for more of that kind of sausage?

There is a difference of opinion in the sausage trade on this point.

Wholesome product can be made from inexpensive materials, though everybody doesn't know how to make it. On the other hand there are those whose only object is to get the volume or the profit.

He Had a Bright Idea.

In a letter to THE NATIONAL PROVISIONER a sausage manufacturer on the Pacific Coast relates an experience that is worth passing on. He says:

Editor THE NATIONAL PROVISIONER:

A young fellow came to the plant a few weeks ago, said he had a special formula for a sausage, and wanted to know if I could furnish him from 1,000 to 5,000 lbs. per day if we could get together on price. He said he had made arrangements to demonstrate and sell this special product in two of the larger stores in our city and in the public market.

After some argument he finally gave me the formula, which was (don't laugh!)

30 lbs. cured pork trimmings
70 lbs. cured cow trimmings
2 oz. pepper
1 oz. garlic.

The meats were to be ground through the 3/16-in. plate, a little water added, the meats and seasoning mixed a few minutes and then stuffed in beef rounds, each sausage to weigh 9 oz.

It Went Like Hot Cakes.

I thought he was crazy, but told him that if he would make a deposit I would produce the sausage for him. I made him an 11c price because I had about 50 bbls. of old trimmings on hand. He kept buying more each day, and being interested in how he managed to turn over such a large volume I started to check up.

In the store I visited he was using a lady demonstrator who was selling these 9 oz. sausages like hot cakes at 18c each, or two for 35c.

"Something entirely new," "It's a secret formula," "It's Polish mettwurst, lady, on the market for the first time," were some of the phrases used during the demonstration.

At another store the sausage was called "Eastern butcher boy bologna."

In the few weeks I made this sausage for this fellow he made a lot of money. Finally he sold out. Before he left he told me he was going to Chicago and go into the proposition in a big way, and I'll bet he puts it over!

I mention this experience to prove that the public will buy more sausage and like it if we adopt some new method of presenting it to them.

Yours truly,
SAUSAGE MAKER.

The manufacturer of quality sausage will no doubt wonder if all of the story has been told.

What Was the Final Result?

It would be interesting to know what the consumer's reaction to this sausage was. Did she come back for more? Did her experience with a cheap, unsatisfactory product "sour" her on sausage generally?

What was the effect on the sale of a large volume of this cheap product on per capita sausage consumption in this particular city?

And finally, what was this particular sausage manufacturer's responsibility in producing a product of this kind to be sold in competition with high quality product marketed at a price in line with its value?

At least it must be conceded that the "young fellow" was not dumb. He "got his" while the getting was good, got out from under in time, and no doubt left the quality sausage manufacturers of the city "holding the bag!"

DISPLAY INCREASES SALES.

Sausage sales in the retail store invariably jump when varieties and quantities in the display are increased. Many instances could be cited where sales have been increased in this manner.

A Milwaukee dealer who had difficulty moving three or four types of

sausage which he had in his showcase decided to broaden his line and install a sausage department. He started out with the following items: Pork sausage, frankfurters, two popular kinds of salami, minced ham, pressed ham, braunschweiger, cervelat, head cheese and bologna.

By pushing his sausage department at every opportunity he found that his sausage sales during a six months' average jumped from \$30.80 to \$104.20 per week. There are many cases on record where sausage department sales were planned and pushed intelligently, that have jumped as much as 120 per cent.

The fact that sausage sales in the retail store increase when more varieties and greater quantities are displayed should be known by all packer salesmen. It gives them an additional constructive argument for increasing sausage volume.

BUILDING CONSUMER GOOD WILL.

As one step in building retailer good will and appreciation for identified sausage and ready-to-serve products, made by a reputable manufacturer willing to stand behind his quality 100 per cent, Frank M. Firor, Inc., New York City, places a printed insert in every retailer package sent from the plant.

These measure 3 1/2 by 5 in., and are printed in red and blue. One is shown herewith. A second reads:

IT TAKES TEN YEARS TO GROW AN OAK—
SIX MONTHS FOR A SQUASH!

Years of experience are necessary to the manufacture of quality bologna products.

FIROR FLAVORED Products are made by skilled, EXPERIENCED workmen who are proud of their craftsmanship.

A third reads:

A PRODUCT UNIDENTIFIED IS USUALLY A PRODUCT TO BE QUESTIONED!

We want your customers to know who made this product, so we have labeled it prominently.

Our name is your guarantee of highest quality.

Faith is a fog, knowledge is seeing!

Blind faith in your bologna manufacturer is laudable but his willingness to identify himself with his products is REAL knowledge that he is proud of his work and is anxious to have everybody SEE it.

FIROR FLAVORED Products are worthy of your FAITH.

AN ARGUMENT FOR IDENTIFIED PRODUCTS.

For meat products of a greasy nature . . .

- There is scarcely any food product of a greasy nature for which the grease-resisting Kleen Kup is not ideal.
- This package is the result of many years' experience in furnishing the meat industry with packages for sausage meat, chili con carne, lard and other meat products. Highly repellent to grease, its makers believe it to be the best package of its kind available.
- The grease-resisting Kleen Kup is available in sizes from one ounce to ten pounds.



• You incur no obligation by asking us to send samples and suggestions.

KLEEN KUP

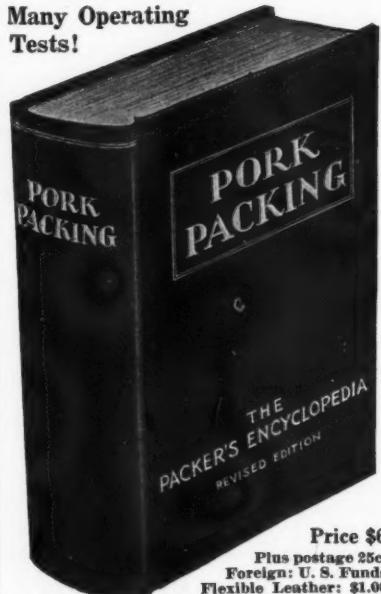
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CHAPTERS

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- II—Hog Killing
- III—Handling Fancy Meats
- IV—Chilling and Refrigeration
- V—Pork Cutting
- VI—Pork Trimming
- VII—Hog Cutting Tests
- VIII—Making and Converting Pork Cuts
- IX—Lard Manufacture
- X—Provision Trading Rules
- XI—Curing Pork Meats
- XII—Soaking and Smoking Meats
- XIII—Packing Fancy Meats
- XIV—Sausage and Cooked Meats
- XV—Rendering Inedible Products
- XVI—Labor and Cost Distribution
- XVII—Merchandising

A Page for the Packer Salesman

Processing Knowledge

Helps Packer Salesman to Move a Larger Volume of Products

WHAT are the requirements for success in meat sales work?

If a dozen packer salesmen were asked this question it is probable no two would agree in all particulars.

Undoubtedly hard work would be placed by many at the top of the list. Good personality, good appearance, forcefulness, good disposition, sincerity and the ability to engender confidence probably would be others.

A thorough knowledge of the products handled should be included.

Must Know His Products.

Certainly one cannot talk convincingly about things of which he knows little. It is doubtful whether familiarity with methods and processes by which meat items are produced would be listed by all as a helpful qualification. Undoubtedly it would be overlooked by some sales managers.

But the fact remains that the more the packer salesman knows about the meat plant and its methods, the better equipped he is to sell. And if processing knowledge were not helpful in a broad way, certainly it would not be a very great handicap.

In the following letter one packer salesman tells how processing knowledge has been helpful to him. He does not say so, but it is evident he also thinks it would be useful to other packer salesmen. He writes:

Editor THE NATIONAL PROVISIONER:

I am a constant reader of the salesman's page of THE NATIONAL PROVISIONER and get much good from the ideas advanced there. However, there is one question in which I am interested and which I never have seen discussed in print. This is: Is it desirable that a packer salesman be well informed on methods of meat processing and manufacturing?

I know successful packer salesmen who have only the vaguest ideas of what occurs between the time when livestock is driven into the plant and finished products are delivered at the loading dock.

Processing Knowledge Useful.

On the other hand, I also know salesmen who have come up through the plant and who are able to hold their own in sales work against any kind of competition in any territory.

From the standpoint of results, there-



fore, it might be difficult to prove that training in the plant is either an advantage or a handicap, although in checking over salesmen of my acquaintance I find that the majority of the outstanding ones have had plant experience. This may not prove true generally, however.

So far as the packer salesman is concerned, the question is of interest only so far as his results are concerned. I have had some who could not be considered experts say they would read up and study meat plant methods if they thought the effort would be helpful in enabling them to turn over a larger tonnage.

To these I have answered that the more one knows about meat plant products the better equipped he is to sell them. I don't think useful information ever hurt anyone.

Many packer salesmen who never have studied meat processing and manufacturing would no doubt find the various subjects interesting, and if the information they gained was of little or no use to them, certainly they would be none the worse off for having acquired it.

Value of Product Knowledge.

But I can give many illustrations of the value of processing knowledge in selling meats.

Recently one of my good retail customers complained rather bitterly of the wide spread between what the producer

Tips for Your Trade

MAKES A HIT WITH CHILDREN.

A New England retail meat dealer redeems his bags with small toys, and he has all the children in his neighborhood offering to go to the butchers for their mothers and neighbors. He says that some of the youngsters come a couple of miles to get his bags. This stunt brings the dealer considerable business, and the investment in small toys pays him good dividends.

is paid for livestock and what the packer asks for fresh and cured cuts, sausage and "ready-to-serve" products. Being familiar with the expenses and losses that must be met out of this spread it was not a difficult matter for me to set this retailer right.

And in doing this I am sure the facts I presented will cause him to question the sincerity of the packer salesman who offers him meats at prices considerably below what other packer salesmen are asking for similar products.

In another case an off-and-on customer asked my advice on the composition of a particular product that looked fine, but which was being sold at a very low price.

My experience in the sausage department enabled me to give him an approximate formula. Knowing the market on the various meats that apparently had been used, I was in a position to estimate what it was costing the packer to produce it. I think I convinced this particular retailer that the product was not the bargain it appeared to be. Anyway, I got more of his business.

Tips for His Trade.

My sausage manufacturing experience also enabled me to advise many retailer customers on profitable methods to dispose of slow-moving cuts, ham and bacon ends, trimmings, etc. By this means I have gained friends who have been helpful to me in building volume.

I do not think it advisable for any meat packer to require that his sales force be recruited from among plant employees, or that all packer salesmen should be required to study and pass an examination in meat plant operation. But I do believe that more packer salesmen should be more familiar with meat methods and processes. This is information readily obtainable and is always useful in sales work.

Thoroughness with which the various phases of meat production are investigated should be dictated by a need for information as revealed by daily contacts. Certainly no packer salesman should approach the task of familiarizing himself with meat plant processes and methods with the idea that it is an unpleasant task to be performed regardless of other considerations.

Yours truly,
PACKER SALESMAN.

Do your sales managers and salesmen read this page?

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Curing Results*
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NEVERFAIL never fails to give complete satisfaction. It gives superior results in every instance and insures high quality. It gives superior flavor because it is a *spiced* cure and gives inimitable goodness to cured meats. NEVERFAIL is the answer to all curing problems. Its uniformity in use and unvarying results will build sales and increase profits. *Use it for greater sales!*

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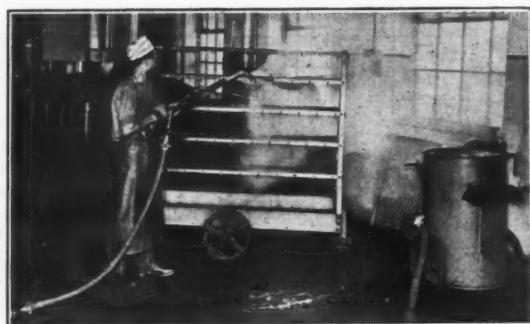


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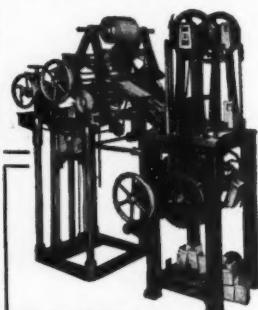
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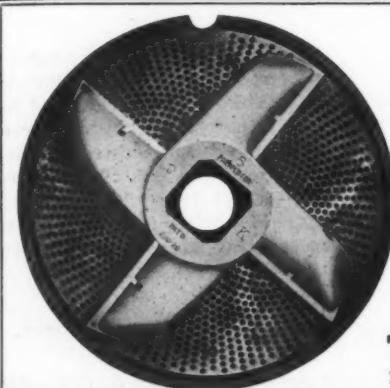


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Provision and Lard Markets

WEEKLY REVIEW

Trade Active—Market Strong—New Highs in Lard—Cash Trade Fair—Stocks Increased Moderately—Hog Run Only Fair—Hogs Steady—Corn Damage and Grain Strength Factor.

Considerable activity and strength was displayed in the market for hog products the past week, particularly in lard. An enlargement in speculative buying power, following strength in grains and reports of serious corn losses, outweighed all else.

There was hedge selling and speculative liquidation in September lard on the upturn, while the hog market was only about steady, but the selling in lard was gradually absorbed and the market moved into new high ground for the season. An upward tendency in cottonseed oil, an unfavorable weather situation in the western cotton belt, especially in Texas, increased bullish sentiment in lard and on edible fat-stuffs generally.

Commission houses were buyers on balance, while trade among cash interests was about evenly divided. There was buying, supposedly lifting of hedges, at times. Recently, a tank steamer was reported loaded with lard out of Chicago, and there was gossip of another one having loaded this week. These two ships were said be carrying between 4 and 5 million pounds of lard to Europe.

Lard Stocks Increase.

There was nothing particularly encouraging in the statistical news, but the situation is expected to improve materially in the future. Cold storage holdings of lard throughout the United States on July 1 were officially placed at 195,973,000 lbs., compared with 182,240,000 lbs. the previous month, 186,250,000 lbs. a year ago and a five-year average of 150,439,000 lbs. Chicago lard stocks during the first half of July increased 1,727,000 lbs. to 127,989,000 lbs., compared with 108,709,000 lbs. last year.

Distribution of hog products, however, is on a fairly good scale. This appears to be particularly true of meats. Cold storage holdings of meats on July 1 totaled 735,226,000 lbs., compared with 738,076,000 lbs. the previous month, 862,509,000 lbs. a year ago and a five-year average of 877,580,000 lbs. Receipts of hogs at western packing points last year were 439,300 head, compared with 355,400 head the previous week, and 538,500 head the same week last year.

Average price of hogs at Chicago at the outset of the week was 4.60c, compared with 4.45c the previous week, 4.55c a year ago, 4.50c two years ago and 6.30c three years ago. Average price of hogs at Chicago held between 4.90c and 5c, or about the same levels as prevailed the previous week. Average weight of hogs received at Chicago last week was 249 lbs., compared with 244 lbs. the previous week, 253 lbs. a year ago and 260 lbs. two years ago.

Official exports of lard for the week ended July 7 totaled 5,720,000 lbs., compared with 5,518,000 lbs. last year. Ex-

See page 25 for chart review of provisions stocks for six months.

ports from January 1 to July 7 have been 273,769,000 lbs., compared with 314,562,000 lbs. the same time last year.

Considerable attention was given to the drought in the western cotton belt, which will assume very serious proportions unless heavy general rains are received within the next two weeks. Dryness and heat in the corn belt were claimed to be doing serious damage to the corn crop. A prominent western crop expert said that present prospects in nine leading corn states appear to be that there would be a crop of about 1,092,000,000 bu., compared with the Government July 1 forecast of 1,262,000,000 bu. The crop last year was 1,465,000,000 bu. and the average for the preceding five years is 1,690,000,000 bushels.

PORK—Market was steady at New York with demand moderate. Mess was quoted \$19.75 per barrel; family, \$21.00 per barrel; fat backs, \$14.00@19.00 per barrel.

LARD—Demand was moderate and routine, but the market was firm. At New York, prime western was quoted

at 4.80@4.90c; middle western, 4.65@4.75c; New York City tierces, 4 1/2c; tubs, 6 1/2c; refined Continent, 4 1/2c@4 1/2c; South America, 4%@5c; Brazil kegs, 5@5 1/2c; compound, ear lots, 7 1/2c; smaller lots, 8c.

At Chicago, regular lard in round lots was quoted at 2 1/2c under July; loose lard, 52 1/2c under July; leaf lard, 57 1/2c under July.

(See page 34 for later markets.)

BEEF — Demand was fair and the market somewhat higher at New York. With mess was nominal; packer, nominal; family, \$13.50@14.50 per barrel; extra India mess, nominal.

U. S. INSPECTED HOG KILL.

Inspected hog kill at 8 points during week ended Friday, July 13, 1934, as reported to THE NATIONAL PROVISIONER:

	Week ended July 13	Prev. week,	Cor. year ago,
Chicago	177,272	106,823	162,975
Kansas City, Kans.	64,212	54,926	60,150
Omaha	40,841	34,289	59,977
St. Louis & East St. Louis	54,741	45,941	68,761
St. Louis City	31,471	22,654	40,681
St. Joseph	34,026	33,807	41,058
St. Paul	30,465	24,190	28,044
N. Y., Newark & J. C.	29,502	26,492	38,139
Total	402,531	341,122	409,094

Hog Cutting Losses Are Larger

Weakness in the fresh pork market both at western points and in Eastern consuming centers and an average price for good butcher hogs higher than that of a week ago resulted in a less satisfactory showing in cut-out values for the first four days of the current week, than for those of a week earlier.

An average price of \$4.65 for each of the last two days of the period against a lower top was shown. The low average for the period was \$4.45 made on Monday when the top was \$5.00. In spite of the fact that the top dropped to \$4.95 the average increased 20c.

The general quality of hogs at Chicago was fairly good, bulk of the butchers falling between the 180- and 240-lb. weights. Heavy butchers were scarce and commanded the best prices paid during the period. Few butchers

weighing over 300 lbs. were received. Rather good packing sows comprised about one-fourth of the week's run.

Receipts at the seven principal markets for the period totaled 302,300 head against 283,400 a week ago and 296,800 a year ago. Good demand for these larger receipts appeared to be stimulated by the fairly good outlet for cured meats and for the better long-time outlook in the lard market rather than any strength in the fresh pork market which suffered considerably as a result of the prevailing hot weather. Loins dropped to the lowest level in six weeks, losing in this period from 3 1/2c to 6c per pound.

The following test is worked out on the basis of live hog costs and green product prices at Chicago during the four-day period as shown in THE NATIONAL PROVISIONER DAILY MARKET SERVICE, average costs and credits being used.

	160 to 180 lbs.	180 to 220 lbs.	220 to 250 lbs.	250 to 300 lbs.
Regular hams	\$1.93	\$2.05	\$2.02	\$1.96
Picnics	.49	.47	.46	.42
Boston butts	.47	.47	.47	.47
Pork loins	1.26	1.14	.97	.85
Bellies, light	1.52	1.51	1.10	.33
Bellies, heavy	...	...	.34	.33
Flat backs	...	...	.20	.34
Plated and jowl	.12	.15	.15	.19
Rare leaf	.13	.13	.13	.13
P. S. lard, rend. wt.	.85	.92	.85	.77
Spare ribs	.08	.08	.08	.08
Regular trimmings	.16	.15	.14	.14
Feet, tail, neckbones	.04	.04	.04	.04
Total cutting value (per 100 lbs. live wt.)	\$7.05	\$7.11	\$6.95	\$6.65
Total cutting yield	68.00%	69.00%	70.50%	71.50%
Crediting edible and inedible offal values to cost of well finished live hogs of the weights in tax, the following results are secured:				
Loss per cwt.	\$.14	\$.28	\$.45	\$.76
Loss per hog	.24	.56	1.06	2.09

the above totals and deducting from these the shown plus all expenses, including the processing

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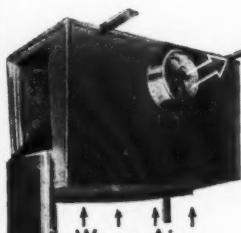


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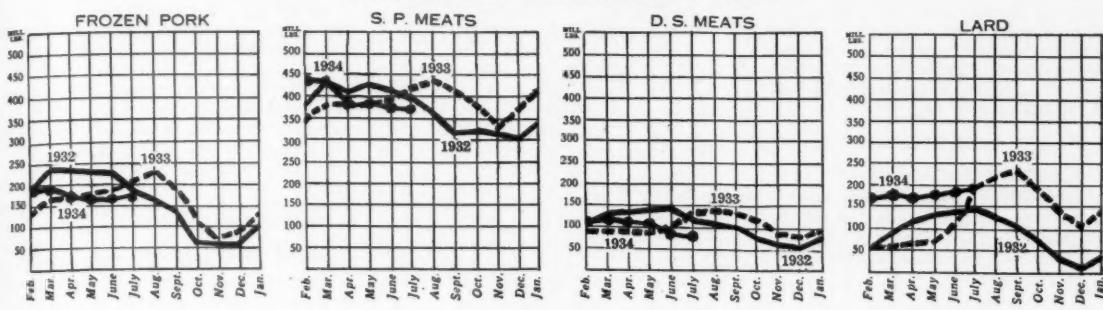
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STORAGE STOCKS OF PORK AND LARD

IN THE UNITED STATES—U. S. GOVERNMENT REPORT



THE NATIONAL PROVISIONER CHART SERVICE—COPYRIGHT 1934 BY THE NATIONAL PROVISIONER, INC.

This chart in THE NATIONAL PROVISIONER MARKET SERVICE series shows the trend of storage stock accumulations of pork meats and lard during June and the first half of 1934 compared with like periods in 1933 and 1932.

Frozen Pork.—Stocks of frozen pork were low during June when compared with the same month in each of the past two years. Throughout the year they have been below those of 1932 and for the past three months under those of 1933. This is accounted for in large measure by the smaller hog slaughter and by the fact that a considerable quantity of product has been drawn off the market for government account. Frozen pork stocks were pretty well cleaned up before the trade entered the summer kill. Loins have been a little high to establish freezing limits. On the other hand, weather conditions were unfavorable for merchandising the entire production and some compulsory freezing was done from time to time. In addition to this, the bulk of the freezing has been for future cure and the usual holdings of sausage materials.

S. P. Meats.—Stocks of pickled meats have taken a steady downturn since the first of the year, when they were higher than those of one and two years earlier. With the beginning of the summer season these stocks dropped below those of the past two years. There was a good trade on pickled meats during June with a good smoked meat business. Boiling hams were active, with stocks rather low, but the results by the end of the month hardly measured up to expectations in the way of volume for the Fourth of July trade which has come to be regarded as the peak of the season. Results with this product seem to indicate that regardless of shortage there is a price level beyond which buying declines, a fact that should be kept in mind at all times by the trade. In other words, the supply element is only one of the two major factors to be considered in figuring the price that can be secured for product.

D. S. Meats.—Dry salt meats are in a basically strong position, with stocks well under those of one and two years ago on July 1. Production of the class of meats going into dry salt cure has

been rather limited, stocks are somewhat centralized and there has been a good trade in the South, believed influenced in a considerable measure by good prices being received for cotton and cash payments to farmers on government contracts. Outlook for this product appears good, with supplies rather limited. There is a good deal of question whether the marketing of packing sows during the balance of the season will be as heavy as usual, in view of the smaller prospective hog crop and better price outlook in this field.

Lard.—Lard stocks have been consistently high throughout the first half of 1934. Both domestic and export trade has been quiet, and there has been little interest in the speculative market. However, with the prospects of hog shortage trade interests appear to be showing more friendliness to lard, and the present outlook is better than it has been for some time, even though the export outlook evidences little immediate improvement.

CURED MEAT PRICES.

Cured pork prices at Chicago for June, 1934, with comparisons, are reported by the Bureau of Agricultural Economics as follows:

CURED PORK AND PORK PRODUCTS.

June, May, June,
1934. 1934. 1933.

Hams, smoked, reg. No. 1—			
8-10 lbs. avg.	\$17.62	\$18.10	\$15.00
10-12 lbs. avg.	17.62	16.03	14.72
12-14 lbs. avg.	17.62	15.77	14.78
14-16 lbs. avg.	18.12	15.77	14.88

Hams, smoked, reg. No. 2—

8-10 lbs. avg.	16.75	15.10	18.22
10-12 lbs. avg.	16.75	15.10	12.53
12-14 lbs. avg.	17.00	15.10	12.94
14-16 lbs. avg.	17.12	15.05	13.00

Hams, smoked, skinned, No. 1—

16-18 lbs. avg.	19.35	16.35	15.60
18-20 lbs. avg.	19.41	16.35	15.44

Hams, smoked, skinned, No. 2

16-18 lbs. avg.	18.12	15.35	14.34
18-20 lbs. avg.	18.19	15.05	14.34

Bacon, smoked, No. 1, dry cure—

6-8 lbs. avg.	19.75	18.65	16.10
8-10 lbs. avg.	19.62	18.30	15.28

Bacon, smoked, No. 1, S. P. cure—

8-10 lbs. avg.	17.84	16.55	13.94
10-12 lbs. avg.	17.60	16.25	13.69

Picnics, smoked,

4-8 lbs. avg.	11.94	11.10	10.12
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Backs, dry salt,

12-14 lbs. avg.	7.75	6.25	6.12
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Lard—

Refined, H. W. tubs.	7.31	7.00	7.04
Substitutes	7.38	7.45	7.60

Refined, 1-lb. cartons.	7.81	7.50	7.54
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STOCKS IN COLD STORAGE.

Stocks of meat and lard in cold storage on July 1, 1934, and those of one and two years ago, as shown in the accompanying chart, are reported as follows:

1932.				
Frozen	S. P.	D. S.	Lard.	
Lbs. (000 omitted.)				
Jan. 1.....	141,468	333,018	84,016	50,518
Feb. 1.....	157,151	386,411	108,892	78,386
Mar. 1.....	244,151	445,346	122,902	92,361
Apr. 1.....	248,208	420,966	124,969	106,411
May 1.....	239,743	430,260	127,857	110,724
June 1.....	224,778	436,413	127,601	120,828
July 1.....	196,095	414,372	120,743	131,500
Aug. 1.....	156,055	372,787	111,210	121,618
Sept. 1.....	121,114	347,914	109,428	103,160
Oct. 1.....	78,569	327,022	91,168	70,582
Nov. 1.....	59,844	306,758	65,561	34,358
Dec. 1.....	62,294	294,590	40,285	23,186

1933.				
Frozen	S. P.	D. S.	Lard.	
Lbs. (000 omitted.)				
Jan. 1.....	102,648	322,229	69,190	40,481
Feb. 1.....	143,085	350,114	81,885	52,841
Mar. 1.....	153,881	368,592	86,948	58,182
Apr. 1.....	153,095	369,925	87,117	61,718
May 1.....	165,875	374,735	89,068	71,851
June 1.....	175,727	388,000	104,228	110,581
July 1.....	212,779	415,861	131,218	196,941
Aug. 1.....	228,333	432,900	146,615	215,267
Sept. 1.....	194,823	414,222	144,060	224,207
Oct. 1.....	128,497	374,320	126,148	102,502
Nov. 1.....	75,465	324,982	92,633	133,850
Dec. 1.....	81,722	361,855	81,186	110,594

1934.				
Frozen	S. P.	D. S.	Lard.	
Lbs. (000 omitted.)				
Jan. 1.....	128,763	402,632	97,301	132,510
Feb. 1.....	177,292	442,458	110,074	168,756
Mar. 1.....	184,836	458,009	118,298	177,560
Apr. 1.....	167,436	381,248	108,538	173,775
May 1.....	165,772	381,633	107,919	179,441
June 1.....	166,180	376,631	89,294	182,576
July 1.....	167,403	369,293	91,266	195,973

PROCESS TAX REFUND SPEEDED.
Steps were taken this week by the Commissioner of Internal Revenue to speed the refunding of taxes paid on meat and lard exported. The slow refund from the government of this drawback has been the source of a good deal of embarrassment to packers and in some quarters it is believed to have had a tendency to slow up the export trade as packers were unable to carry the tax burden, particularly on lard where the tax constitutes a large part of the sale price.

Approximately \$6,275,000 of the packers' money is tied up in these taxes and other millions are said to be involved

in cases still in the hands of regional tax collectors. Additional employees have been hired in the processing tax division of the Internal Revenue bureau to speed up the handling of claims. At the same time the commissioner stated that the granting of extensions of time for the payment of processing taxes and failure of packers to properly fill out their refund claims had added to the delay.

CASINGS IMPORTS AND EXPORTS.

Imports and exports of casings during May, 1934, with countries of origin and destination, are reported by the Bureau of Foreign and Domestic Commerce as follows:

	IMPORTS.		
	Weasands, Sheep, lamb and goat. Denmark	bladders, intestines. France	Others. Ibs.
Sheep, lamb and goat.	Ibs.	Ibs.	Ibs.
Denmark	.....	.....	5,835
France	.....	9,460	.....
Germany	257	.....	8,618
Latvia	.....	31,837	.....
Canada	12,282	7,318	163,842
Argentina	43,456	.....	8,820
Chile	222,139	80	94,902
Uruguay	1,506	.....	.....
British India	5,106	.....	.....
China	44,048	159	32,603
Iraq	15,384	.....	.....
Persia	77,439	.....	.....
Syria	4,202	.....	.....
Tunisia	25,124	.....	12,171
Australia	185,485	.....	.....
New Zealand	328,578	.....	.....
Morocco	17,000	.....	.....
Others	8,907	.....	.....
Total	601,913	7,557	807,643

Sheep, lamb and goat casings imported during April were valued at \$1,004,594; weasands, bladders and intestines at \$886 and other casings at \$103,757.

	EXPORTS.		
	Hog casings. Belgium	Beef casings. Denmark	Others. France
Hog casings.	Ibs.	Ibs.	Ibs.
Belgium	33,378	128,854	.....
Denmark	.....	35,294	.....
France	16,093	69,112	.....
Germany	308,857	1,384,712	30,487
Italy	11,570	15,696	.....
Netherlands	26,233	161,415	2,625
Norway	.....	43,698	.....
Poland & Danzig	8,233	.....	.....
Spain	13,900	65,680	.....
Sweden	2,939	59,499	53
Switzerland	10,431	33,998	.....
United Kingdom	538,591	25,709	14,370
Canada	76,731	18,602	22,123
Australia	69,611	.....	.....
New Zealand	25,423	.....	.....
Un. of S. Africa	11,656	.....	.....
Others	2,418	5,912	1,541
Total	1,156,324	2,033,890	100,190

Hog casings exported during the month were valued at \$447,851; beef casings \$271,092 and other casings, \$62,055.

In addition to the above, 305 lbs. of hog casings, 1,030 lbs. of beef casings and 57 lbs. of other casings were exported to Hawaii. Porto Rico took 505 lbs. of beef casings.

MEAT EXPORTS DURING MAY.

Meat exports from the United States during May totaled 12,543,137 lbs., of which 7,594,268 lbs. went to the United Kingdom. Hams and shoulders constituted the principal meat item exported and made up the largest single export to the United Kingdom. Export of the different items during the month and their valuation were as follows:

	Quantity. Lbs.	Valuation.
Carcasses, fresh or frozen..	6,497	\$ 506
Loin and other pork, fresh or frozen	2,472,905	265,787
Ham and shoulders, cured.	5,749,885	797,328
Bacon	1,936,069	149,380
Cumberland and Wiltshire	16,259	2,054
Other pork, pickled or salted	2,203,376	143,073
Sausage not canned	158,146	29,393
Total	12,543,137	\$1,387,521

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MAY LARD EXPORTS.

Exports of lard, neutral lard and cooking fats other than lard, with countries of destination, are as follows:

	Lard, lbs.	Other cooking fats, lbs.	Neutral lard, lbs.
Belgium	2,230,239	.....	116,590
Denmark	113,950	.....	76,533
Finland	234,358	.....	.....
France	49,436	50	.....
Germany	5,216,436	.....	38,045
Irish Free State	.....	.....	24,538
Gibraltar	11,400	.....	.....
Iceland	2,030,072	10	.....
M. G. & Cyprus	101,588	1,000	.....
Netherlands	2,322,762	.....	67,500
Norway	70,141	122	5,693
Portugal	5,500	.....	.....
Spain	26,400	.....	.....
Sweden	64,568	.....	111,040
Switzerland	60,086	.....	.....
United Kingdom	39,465,928	1,020	26,299
Canada	417,111	1,350	.....
Br. Honduras	22,706	964	.....
Costa Rica	288,250	788	.....
Guatemala	162,800	6,600	.....
Nicaragua	12,457	93	.....
Panama	469,960	17,050	.....
Salvador	11,100	572	.....
Mexico & St. Pierre I.	7,913,531	14,331	.....
Newfs. & Labrador	6,025	.....	.....
Bermudas	1,021	7,442	.....
Barbados	12,735	101	.....
Jamaica	10,070	10,318	.....
Cuba	1,826,580	3,008	.....
Dom. Rep.	1,007,750	192	.....
Neth. W. Indies	14,184	17,615	.....
Haiti, Rep. of	560,547	.....	.....
Vir. Is. of U. S.	40,416	22,290	.....
Argentina	495,204	24,033	.....
Ecuador	103,273	2,196	.....
Pern	568,930	2,107	.....
Venezuela	4,851	.....	.....
Japan	.....	10,568	.....
Philippine Islands	83,934	6,569	.....
Canary Islands	57,680	.....	.....
Others	24,134	15,760	.....
Total	66,167,062	177,739	456,247
Value	\$3,428,091	\$17,024	\$24,788

May exports compare with April exports of 39,349,946 lbs. of lard, 234,225 lbs. of other cooking fats and 292,851 lbs. of neutral lard.

REFRIGERATION PIPING.

(Continued from page 17.)

Normally, deviations may be made from Table 3 at the expense of wire-drawing and pressure drop from high vapor velocities. The values given are indicated as good practice from practical experience and are used as criteria from a design standpoint.

The maximum length of one continuous coil of brine pipe is likewise a question of heat transmission rate. This is reflected by the rise in brine temperatures as it passes through the pipe coil. It is customary to use $\frac{3}{4}$ -in. or 1-in. control valves with coils of either $1\frac{1}{4}$ -in. or 2-in. piping with a brine velocity through the coil of approximately 0.75 feet per second, or 45 feet per minute.

The specific heat of the brine will vary with temperature and gravity but throughout the cycle these are fairly constant. Therefore, it is considered economical to permit a 5 degs. Fahr. rise through the coil and from one to two degs. Fahr. further rise in the mains according to the size of the system.

Under such conditions there are maximum areas of pipe surface that should be used per valve to limit the brine temperature rise to 5 degs. Fahr. Table 4 is a tabulation of such lengths.

Longer lengths mean either a larger brine temperature rise than 5 degs. Fahr. (consequently a lower back pressure for the compressors), or a higher brine velocity through coils, which means higher pumping costs. Conversely, the use of the Table 4 values or smaller means a brine temperature

rise less than 5 degs. Fahr. (or that less brine will be required if the rise is maintained at 5 degs. Fahr.) This permits flexibility in pumping; two brine pumps of, say, 400 g.p.m. and 200 g.p.m. may be used in a cold-storage plant to meet varying loads.

In ice-manufacturing plants, direct-expansion ammonia piping is submerged in sodium or calcium brine. Fig. 3 shows the lineal feet of $1\frac{1}{4}$ -in. extra-heavy pipe used per ton of ice with a gravity feed system based on a U of 30 B.t.u. per hr. per sq. ft. per degree of temperature head.

Scant Pipe Surface Costs Money.

Thus it is plain that if a pipe surface is scant for a certain job it can be and is compelled to handle the load by giving it a larger temperature head. This means lower back pressure at which the compressor must operate. Inasmuch as ammonia or any other commonly-used volatile refrigerant inherently has a larger specific volume of vapor at lower back pressures than at high back pressures, it means that more compressor displacement will be required to handle a given tonnage capacity.

The plant may have excess compressor capacity but usually it has not, which means it must be supplied. In any event, it means operating more compressor capacity than would otherwise be required. If the compressors are running only part time due to excess compressor capacity, it means they must run longer to accomplish the same tonnage; if they are already running 24 hours a day, another compressor must be installed.

It is foolish economy to skimp on pipe to save initial capital investment and pay for this omission forever in additional compressor equipment and power bills. We must not send a boy to do a man's job.

Inadvisable Operation.

From a practical standpoint, no plant—new or old, modern or antiquated—should be operated at an abnormally large temperature head.

If it is a modern plant, no doubt it will meet specifications of a definite duty for a certain schedule. If it is antiquated, time may have played peculiar antics in changing the schedule and the nature of the service, or in wear or obsolescence requiring revamping of piping and equipment.

However, the mere requirement does not compel action. Some plants see the light and make changes to obtain operating economies. Others know changes should be made but hesitate to make them. Still others do not see the necessity and may not know of it. They will continue to operate at a disadvantage in ignorant bliss until forced to shut down.

SAUERKRAUT IN CANNING CODE.

The National Kraut Packers Association, which claims to represent 90 per cent of the country's kraut industry, has asked the NRA to include all kraut packers under the code for the canning industry. It is announced that public hearing on this request will be held Wednesday, July 25, at the Mayflower hotel, Washington, D. C., under the direction of Deputy Administrator Walter White.

Tallow and Grease Markets

WEEKLY REVIEW

TALLOW—A fairly active market and decided strength features tallow at New York the past week. Early in the week there were reports of sales of extra at 3½c and 4c f.o.b., with subsequent claims that buying was of a speculative character and that consumers had not bought above 3½c f.o.b. Ultimately, however, outside tallow sold at 3½c f.o.b. and on Wednesday it was estimated that upwards of 1,000,000 lbs. of extra sold at 4½c f.o.b., a new high for the present upward movement.

Throughout the week it was apparent that producers' ideas were firm, and that they were in a comfortable position. As a result of this and speculative absorption, consumers were forced to come up in their ideas to secure sizeable supplies. Little or nothing was heard of export interest during the week although foreign exchange rates maintained a very steady tone and were firm compared to the dollar.

It was difficult to ascertain whether or not the Pacific Coast labor troubles were having influence on the eastern tallow market, although some quarters entertained such ideas. At any rate the market was strong at the best levels of the year.

At New York, special was quoted at 3%@3½c; extra, 4½c f.o.b.; edible, 4c nominal. Some felt the tallow market had been influenced by reports of serious losses to the corn crop since the beginning of the present month.

Liberal sales of tallow were made at Chicago during the week for July and August delivery. Prime packers' tallow moved at 4½c. Cincinnati and Kansas City, 4c; special tallow at Chicago, 4c.

There was no London auction this week. At Liverpool, Argentine beef tallow, July-August shipment, was unchanged at 16s 9d, while Australian tallow at Liverpool, July-August, was unchanged at 17s 9d.

STEARINE—Last business reported at New York was at 6c. Market was quiet but firm, however, with sellers asking 6½c. At Chicago, market was moderately active and firm. Oleo was quoted at 5%@6c.

OLEO OIL—A fair demand and moderate offerings resulted in further advances in this quarter the past week. At New York, extra was quoted at 6%@7c; prime, 6½@6½c; lower grades, 5½c.

At Chicago, demand was fair and the market firm. Extra was quoted at 6½c.

See page 34 for later markets.

LARD OIL—Demand was moderate, but the undertone was firmer due to strength in raw materials. At New York, No. 1 was quoted at 6½c; No. 2, 6c; extra, 7c; extra No. 1, 6¾c; prime, 9½c; winter strained, 7½c.

NEATSFOOT OIL—Demand was moderate, but the market displayed a steadier tone. Cold test at New York was quoted at 16½c; pure, 12¾c; extra, 7c; No. 1, 6¾c.

GREASES—Position of the grease market strengthened rather materially at New York the past week under the influence of moderate offerings, a fairly good consuming demand and new highs for the move in tallow. While no large business was reported in greases, a fairly good trade appeared to be passing from day to day, although largely of a routine character.

Grease prices reached the best levels of the move, without any evidence of particular pressure from producers. Unfavorable conditions for the corn crop, drought in the western cotton belt and strength in other commodities had something to do with shaping sentiment in grease circles.

At New York yellow and house were quoted at 3½c f.o.b.; A white, 4@4½c; B white, 3%@4c; choice white, 4½@4½c nominal.

At Chicago trading was active in July and August deliveries. Choice white grease moved at 4½c at Cincinnati; brown grease, 3½c Cincinnati. Large producers' stocks appear to be closely sold up.

At Chicago, brown was quoted at 3%@3½c; yellow, 3½@3½c; B white, 3½c; A white, 3%@4c; choice white, all hog, 4%@4½c.

By-Products Markets

Chicago, July 19, 1934.

Blood.

Demand less active; undertone weaker.

Unit Ammonia.
Ground \$2.25@ 2.35
Unground 2.15@ 2.25

Digester Feed Tankage Materials.

Product testing 10 to 12 per cent offered at \$1.75@1.85.

Unit Ammonia.
Unground, 10 to 12% ammonia \$1.75@1.85 & 10c
Unground, 8 to 10% ammonia 2.00@2.20 & 10c
Liquid stick @1.75

Dry Rendered Tankage.

Market continues quiet, but offerings not heavy.

Hard pressed and exp. unground per unit protein \$4.40@4.25
Soft prod. pork, ac. grease & quality, ton @25.00
Soft prod. beef, ac. grease & quality, ton @20.00

Packinghouse Feeds.

Trading slow. Prices steady with last week.

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INEDIBLE FAT EXPORTS.

Exports of inedible fats from the United States during May, 1934, with principal countries of destination, are reported as follows:

	Other animal greases and fats, Tallow, lbs.	Neats- foot oil, lbs.	Neats- foot oil, lbs.
Germany	22,343	49,522	
Italy	1,208	40,165	10,029
Netherlands		11,470	5,356
Spain		582,604	5,985
United Kingdom		1,335,346	10,764
Canada		8,863	90
Guatemala		20,905	160
Honduras	30,000	50,110	34
Nicaragua	125	1,160	1,631
Mexico		56,581	
Jamaica	471,257	558,062	400
Cuba		204,560	
Dom. Rep.		134,529	
Haiti, Rep. of			
Chile		31,002	4,585
Columbia		52,141	5,752
Japan	310,924	2,023	7,805
Other			
Total	613,902	8112,775	102,083
Value	\$34,430	\$123,220	\$11,917

COTTONSEED PRODUCTS EXPORTS

Exports of cottonseed products for eleven months ending June 30, 1934, compared with those of the same period a year earlier are reported by the Department of Commerce as follows:

	1934.	1933.
Oil, crude, lbs.	14,353,028	32,676,801
Oil, refined, lbs.	6,187,615	8,138,762
Cake and meal, tons of 2,000 lbs.	72,553	149,272
Linters, running bales	141,082	145,051

CAKE AND MEAL EXPORTS.

Cottonseed cake exported from the United States during May totaled 2 tons valued at \$60. Cottonseed meal exports totaled 68 tons valued at \$2,180.

PRODUCTION AND CONSUMPTION OF COTTON SEED AND PRODUCTS.

Cotton seed received, crushed, and on hand, and cottonseed products manufactured, shipped out, and on hand for seven months, ended June 30, 1934, and 1933.

COTTON SEED RECEIVED, CRUSHED, AND ON HAND (TONS).

United States	Received at mills*	Crushed	On hand at mills	June 30.
	Aug. 1 to June 30. 1934.	1933.	1934.	
Alabama	227,168	200,520	261,590	217,623
Arizona	37,252	27,683	34,588	93
Arkansas	50,896	30,608	321,047	193
California	88,126	53,083	89,143	53,790
Georgia	370,357	352,858	345,430	337,160
Louisiana	136,800	180,642	133,627	180,250
Mississippi	468,664	520,067	444,865	508,394
North Carolina	232,051	237,254	230,719	238,936
Oklahoma	372,248	349,857	383,054	355,338
South Carolina	199,100	231,626	197,933	232,432
Tennessee	281,198	410,390	289,064	354,355
Texas	1,326,712	1,434,511	1,310,133	1,506,008
All other states	66,297	56,954	65,890	57,328

*Includes seed destroyed at mills but not 220,938 tons and 300,024 tons on hand Aug. 1, nor 55,302 tons and 55,888 tons reshipped for 1934 and 1933 respectively.

COTTONSEED PRODUCTS MANUFACTURED, SHIPPED OUT, AND ON HAND.

Season.	On hand	Produced Aug. 1	Shipped out Aug. 1	On hand
	Season.	On hand	Produced Aug. 1	Shipped out Aug. 1
Crude oil (pounds)	1933-34	*81,209,417	1,268,994,510	1,274,703,281
Refined oil (pounds)	1933-34	28,521,581	1,390,676,057	1,375,041,485
Hull fiber (tons)	1933-34	676,331,574	**1,153,045,027	63,1,207
Linters (running bales)	1932-33	628,420,148	1,216,784,760	740,728,116
Cake and meal (tons)	1932-33	160,874	1,843,170	1,827,896
Hull fiber (500-lb. bales)	1932-33	114,656	2,021,539	1,939,455
Linters (500-lb. bales)	1932-33	76,686	1,070,016	1,112,095
Cake and meal (500-lb. bales)	1932-33	162,773	1,270,420	1,352,843
Hull fiber (500-lb. bales)	1932-33	235,521	713,160	838,037
Grabots, motes, etc. (500-lb. bales)	1932-33	985	40,955	40,624
Grabs, mites, etc. (500-lb. bales)	1932-33	4,138	18,263	19,127
Grabots, mites, etc. (500-lb. bales)	1932-33	3,216	37,267	35,352
Grabots, mites, etc. (500-lb. bales)	1932-33	15,250	27,120	36,129

*Includes 4,274,646 and 4,370,558 pounds held by refining and manufacturing establishments and 14,320,860 and 13,708,930 pounds in transit to refiners and consumers August 1, 1933, and June 30, 1934, respectively.

†Includes 5,498,953 and 4,439,073 pounds held by refiners, brokers, agents, and warehousemen at places other than refineries and manufacturing establishments and 12,642,917 and 9,303,291 pounds in transit to manufacturers of lard substitute, oleomargarine, soap, etc., August 1, 1933, and June 30, 1934, respectively.

**Produced from 1,253,604,397 pounds of crude oil.

MEMPHIS PRODUCTS MARKETS.

(Special Report to The National Provisioner.)

Memphis, Tenn., July 18, 1934.

Cottonseed meal was again higher and closed practically at the highs for the day. Regardless of outside markets cottonseed meal displayed a very firm undertone, and selling was confined largely to profit taking and limited hedging. August was in good demand, selling from \$27.25@\$27.50 at the close, and in midsession traded in good volume at \$27.45. On reports of a continued active demand from the west, the cash situation appears very tight, with rumors of overnight sales at slight premiums over the futures. The market closed firm at advances of 20¢ to 35¢.

Cottonseed was dull, with prices somewhat irregular, closing quiet, 10¢ lower to 15¢ higher.

VEGETABLE OIL EXPORTS.

Exports and value of vegetable oils from the United States during April are reported by the U. S. Department of Commerce as follows:

	Lbs.	Value.
Cottonseed oil, refined	554,398	\$38,555
Cottonseed oil, crude	128,512	6,102
Corn oil	190,690	12,248
Cocoanut oil, inedible	1,210,816	37,706
Vegetable soap stock	2,322,091	70,865

The largest amount of cottonseed oil exported to one country was 252,914 lbs., going to Cuba.

HULL OIL MARKETS.

Hull, England, July 18, 1934.—(By Cable.)—Refined cottonseed oil, 14s 3d; Egyptian crude cottonseed oil, 12s 3d.

COTTON OIL TRADING.

COTTON OIL—Store oil demand was fair, and offerings were light and firmly held at New York. Crude oil was quiet but strong; Southeast, 5½¢ bid; Valley, 5½¢ bid; Texas, 5¢ nominal.

Market transactions at New York:

Friday, July 13, 1934.

	Range	Closing		
Sales.	High.	Low.	Bid.	Asked.
Spot			a	
July			615	a 625
Aug.			617	a 625
Sept.	12	625	625	a 625
Oct.	3	623	621	628 a 632
Nov.			639	a 645
Dec.	8	650	648	648 a 650
Jan.	6	655	655	653 a 655
Feb.			655	a 669

Sales, including switches, 30 contracts. Southeast crude, 5½¢ bid.

Saturday, July 14, 1934.

	Range	Closing		
Sales.	High.	Low.	Bid.	Asked.
Spot			a	
July			620	a 631
Aug.			621	a 630
Sept.	9	625	625	624 a 625
Oct.	4	630	629	629 a trad
Nov.			639	a 643
Dec.	5	650	650	648 a 649
Jan.	3	655	654	654 a trad
Feb.			655	a 668

Sales, including switches, 22 contracts. Southeast crude, 5½¢ bid.

Monday, July 16, 1934.

	Range	Closing		
Sales.	High.	Low.	Bid.	Asked.
Spot			a	
July			610	a 635
Aug.			615	a 630
Sept.	20	625	623	621 a 624
Oct.			627	a 630
Nov.			632	a 634
Dec.	5	650	647	644 a 646
Jan.	13	655	654	650 a 652
Feb.			652	a 668

Sales, including switches, 38 contracts. Southeast crude, 5¢ nom.

Tuesday, July 17, 1934.

	Range	Closing		
Sales.	High.	Low.	Bid.	Asked.
Spot			a	
July	1	605	605	605 a 619
Aug.	27	620	613	617 a 620
Sept.	9	625	621	622 a 625
Oct.	2	629	628	625 a 638
Nov.	21	645	641	642 a trad
Dec.	15	651	546	646 a 649
Jan.			648	a 662

Sales, including switches, 75 contracts. Southeast crude, 5½¢ nom.

Wednesday, July 18, 1934.

	Range	Closing		
Sales.	High.	Low.	Bid.	Asked.
Spot			a	
July			605	a 625
Aug.			600	a 618
Sept.	27	620	614	612 a 615
Oct.	17	627	620	616 a 619
Nov.			626	a 630
Dec.	19	646	639	639 a trad
Jan.	5	650	644	644 a trad
Feb.			644	a 659

Sales, including switches, 68 contracts. Southeast crude, 5¼¢ bid.

Thursday, July 19, 1934.

	Range	Closing		
Sales.	High.	Low.	Bid.	Asked.
Sept.			626	615 618 a 620
Oct.			633	620 623 a 629
Dec.			650	639 643 a 642
Jan.			655	645 648 a 649
Feb.			653	653 649 a 653

See page 34 for later markets.

Vegetable Oil Markets

WEEKLY REVIEW

Trade Active—New Highs Established

—Cotton Conditions Somewhat Unfavorable—Allied Markets Steady—Cash Trade Fairly Good—June Consumption Bullish—Corn Losses Attracting Attention—Western Belt Drought Getting Serious.

Operations in cotton oil futures the past week were on a goodly scale, with every indication of growing outside speculative participation. As a result, oil prices again climbed into new high ground for the season. Buying was again based on dryness in the western cotton belt, reports of severe heat and drought losses in the southwestern corn belt, and a more or less satisfactory monthly cotton oil statistical report.

The bulges attracted commission house realizing, but at all times there appeared sufficient new demand to readily take care of selling pressure. Firmness in cotton and steadiness in lard aided somewhat, but in most cases, operators in oil were giving most attention to the prospective decrease in supplies of edible fats this season.

Generally the disposition was to feel that the present cotton outlook is well under 10,000,000 bales, while the knowledge of a sharp reduction in hog population forecasts reduced lard supplies in the future.

Crude Markets Quiet.

Excessively high temperatures prevailed over a good part of the belt, especially in Texas, during the week. There were complaints at times of too much rain in some sections and a noticeable increase in gossip relative to weevils. High temperatures, however, were believed to be keeping the weevil in check. As a result, many reports from the central and eastern belts showed improvement over those of late.

The situation in Texas, however, more than overshadowed conditions elsewhere in the South, owing to the fact that this state usually produces the greater percentage of the cotton crop. Many close observers, both at New York and in the South, were more apprehensive of the western belt conditions this week, although some contend

that rain within the next two weeks might alter the situation considerably.

Crude markets were very quiet but strong and at new highs for the move. In the Southeast crude was 5½c bid; in the Valley, 5¾c bid; in Texas, 5c nominal.

Consumption of oil in June was officially placed at 300,802 bbls., compared with 280,274 bbls. in June, 1933. Consumption for the 11 months this year has been 2,721,000 bbls., compared with 2,764,000 bbls. the same time last season. The visible supply in all positions at the beginning of the present month was 2,150,000 bbls., compared with 2,211,000 bbls. the same time a year ago.

Crop Estimates Lowered.

Old crop statistics however, are having very little influence, the trade watching the probable new crop more

SOUTHERN MARKETS

New Orleans

(Special Wire to The National Provisioner.)

New Orleans, La., July 19, 1934.—Cotton oil remains firm due to recent advances in grains and lard, coupled with dry hot weather in cotton belt. Some traders believe that either lard or cotton can raise oil values. If prices of both of these advance materially from present levels, cotton oil might take a good jump. Crude was quoted at 5½c lb. for Valley and about ¼c lb. lower Texas. There has been a steady demand for refined oil, due to small stocks of crude left unsold.

Memphis

(Special Wire to The National Provisioner.)

Memphis, Tenn., July 19, 1934.—Crude cottonseed oil 5c lb.; forty-one per cent protein cottonseed meal, \$27.50; loose cottonseed hulls, \$8.00.

Dallas

(Special Wire to The National Provisioner.)

Dallas, Tex., July 19, 1934.—Prime cottonseed oil, 4¾c lb.; forty-three per cent meal, \$31.00; hulls, \$11.00.



Many of the leading packers and wholesalers of the middle west, east, and south are selling Mistletoe. Let us refer you to some of them.

G. H. Hammond Company

Chicago,
Illinois

HAMMOND'S
Mistletoe
MARGARINE

Week's Closing Markets

FRIDAY'S CLOSINGS

Provisions.

Hog products easier latter part of week. There was liquidation on setback in grains but trade was mixed on decline as hogs firmed. Top hogs today were \$5.00 at Chicago. Cash trade was routine.

Cottonseed Oil.

Cotton oil was active with easier profit taking on outside weakness but the continued drought in the western cotton belt and the excessive heat in the corn belt checked selling in oil. Southeast crude, 5½c lb., bid; Valley, 5½c lb., bid; Texas, 5c lb., nominal.

Quotations on bleachable cottonseed oil at New York Friday noon were:

July, \$6.00b; Aug., \$6.00@6.10; Sept., \$6.10@6.13; Oct., \$6.15@6.17; Nov., \$6.18@6.30; Dec., \$6.35; Jan., \$6.42@6.43; Feb., \$6.45@6.55.

Tallow.

Tallow, extra, 4½c lb. f.o.b.

Stearine.

Stearine, 6½c lb. plants.

Friday's Lard Market.

New York, July 20, 1934.—Lard, prime western, \$4.80@4.90; middle western, \$4.65@4.75; city, 4½c; refined Continent, 4¾@4¾c; South American, 4%@5c; Brazil kegs, 5½c; compound, car lots, 7¾c.

BRITISH PROVISION MARKETS.

(Special Cable to The National Provisioner.)

Liverpool, July 20, 1934—General provision market quiet and unchanged with a fair demand for hams and lard.

Friday's prices were as follows: Hams, American cut, 96s; hams, long cut, 94s; Liverpool shoulders, square, none; picnics, none; short backs, unquoted; bellies, English, 70s; Wiltshires, unquoted; Cumberrals, exhausted; Canadian Wiltshires, 75s; Canadian Cumberlands, 68s. Spot lard was quoted at 25s 3d.

LARD AND MEAT EXPORTS.

Exports of lard, bacon and hams through the port of New York during the first four days of the current week totaled 991,906 lbs. of lard and 459,007 lbs. of meat.

Lard exports from the United States for the full week ended July 14 totaled 6,613,270 lbs. against 3,760,275 for the same period in 1933. For the packer year to date, exports of lard have totaled 293,905,842 lbs. against 333,061,308 lbs. in the 1932-33 period.

Bacon and ham exports for the week ended July 14 totaled 1,799,000 lbs. against 2,389,000 lbs. a year earlier. For the year to date exports of these products totaled 98,919,830 lbs. against 51,240,050 lbs. from November 1, 1932, to July 15, 1933.

BRITISH HAM QUOTA.

Suggestion has been made by the British Board of Trade to the foreign attaches that an increase be made in the import ham quota, totaling some 40,000 cwt. Of this amount the United States would receive 33,800 cwt. This includes the 20,000 cwt., announcement of which was made early in July and which was to have been shipped by July 17, but of which no official confirmation was received. According to latest advices, the U. S. quota would be required to arrive in the United Kingdom not later than August 15. The allocation is based on last year's ham trade and includes, in addition to that for the United States, 4,450 cwt. from Poland and 1,750 cwt. from the Argentine. Final arrangements await official approval.

According to the specifications the hams will be American short cut, cured in sweet pickle for at least 30 days for hams weighing 12/14 lbs. and ranging up to 45 days for hams 16/18 lbs. in weight. Each ham must be not more than 18 lbs. in weight.

CHICAGO PROVISION STOCKS.

Stocks of meat and lard on hand in Chicago July 14, 1934:

	July 14, 1934	June 30, 1933	July 14, 1933
P. S. lard, lbs.	110,564,394	107,674,265	84,459,379
Other kinds of lard, lbs.	17,424,917	18,547,720	24,250,054
D. S. Cl. bellies, made since Oct. 1, '33, lbs.	12,587,185	13,210,072	20,995,638
D. S. Cl. bellies, made previous to Oct. 1, '33, lbs.	.....	10,000	.....
D. S. rib bellies, made since Oct. 1, '33, lbs.	1,278,733	1,546,436	2,565,924
Extra Sh. Cl. sides, made since Oct. 1, '33, lbs.	000	1,800	1,800

LIVESTOCK AT 62 MARKETS.

Receipts and disposition of livestock at 62 leading markets in June, 1934:

	Receipts.	Local slaughter.	Total ship- ments
CATTLE.			
Total	1,214,973	771,459	432,568
June av. 5 years	968,790	592,462	366,804
CALVES.			
Total	596,726	453,548	152,894
June av. 5 years	478,040	340,034	138,917
HOGS.			
Total	2,683,984	1,934,263	758,914
June av. 5 years	3,049,906	2,053,081	991,913
SHEEP.			
Total	1,809,805	917,901	890,510
June av. 5 years	2,217,722	1,234,548	982,038

NEW YORK LIVESTOCK.

Receipts of livestock at New York markets for week ended July 14, 1934:

	Cattle.	Calves.	Hogs.	Sheep.
Jersey City	4,534	12,374	3,208	33,977
Central Union	2,168	1,066	9	10,501
New York	487	3,927	9,670	7,348
Total	7,188	18,267	12,878	51,898
Previous week	4,923	11,202	15,312	37,066
Two weeks ago	6,116	14,479	13,484	43,460

DROUGHT HIDE SITUATION.

Conferences between tanners' representatives and officials of the AAA have been in progress this week concerning hides and skins produced in the cattle and calf drought emergency slaughter campaign now in progress. Administration officials are reported to have stated that they would cooperate "actively and wholeheartedly" with members of the leather industry to stabilize the hide market.

It has been the fear of members of the leather industry that hides taken from cattle killed for relief purposes threaten to clog the market, and it is believed that immediate steps are necessary to control a situation fast assuming alarming proportions. Tanners claim that a continuation of the government's cattle buying policy along the lines it is now operating will result in collapse of the hide market, prices already having taken a considerable drop.

N. Y. HIDE FUTURE PRICES.

Saturday, July 14, 1934—No session.

Monday, July 16, 1934—Old Contracts—Close: Sept. 7.05@7.15; Dec. 7.35b; Mar. 7.45n; sales 6 lots. Closing 10@13 lower.

Standard—Close: Sept. 8.10b; Dec. 8.30@8.40; Mar. 8.53@8.60; June 8.80@8.90; sales 49 lots. Closing unchanged to 15 lower.

Tuesday, July 17, 1934—Old Contracts—Close: Sept. 7.15 sale; Dec. 7.45b; Mar. 7.55n; sales 2 lots. Closing 10 higher.

Standard—Close: Sept. 8.15b; Dec. 8.45@8.60; Mar. 8.75 sale; June 8.90@9.00; sales 26 lots. Closing 5@22 higher.

Wednesday, July 18, 1934—Old Contracts—Close: Sept. 7.25@7.50; Dec. 7.65b; Mar. 7.75n; sales 2 lots. Closing 10@20 higher.

Standard—Close: Sept. 8.45@8.55; Dec. 8.63@8.70; Mar. 8.95 sale; June 9.15 sale; sales 120 lots. Closing 18@30 higher.

Thursday, July 19, 1934—Old Contracts—Close: Sept. 7.50@7.55; Dec. 7.80@7.90; Mar. 7.90n; sales 3 lots. Closing 15@25 higher.

Standard—Close: Sept. 8.50b; Dec. 8.75@8.85; Mar. 9.05 sale; June 9.25 sale; sales 73 lots. Closing 5@12 higher.

Friday, July 20, 1934—Old Contracts—Close: Sept. 6.85@7.00; Dec. 7.20b; Mar. 7.30n; sales none. Closing 60@65 lower.

Standard—Close: Sept. 7.70@7.80; Dec. 8.15 sale; Mar. 8.30@8.35; June 8.60 sale; sales 181 lots. Closing 60@80 lower.

SAN FRANCISCO SLAUGHTERS.

Combined slaughter of cattle and calves in the San Francisco bay area under federal and city inspection during the first five months of 1934 was considerably higher than in the like period of 1933. Hog and sheep slaughter, however, was less. Comparative figures for the periods were as follows:

	5 mos. 1934.	5 mos. 1933.
Cattle	70,047	64,236
Calves	18,407	9,007
Hogs	208,587	226,673
Sheep	282,614	323,633

Hide and Skin Markets

Chicago.

PACKER HIDES—The situation remained about unchanged this week in the big packer market. Buyers are still bewildered by the confusing reports as to the extent of government purchases of cattle and calves, and no news has yet come from the meeting of representatives of tanners and packers with Administration officials at Washington.

There is a firm feeling among the trade that the Administration will do something to stabilize hide values by withholding hides from government purchased cattle from commercial channels, but there is no indication as yet regarding the actual steps to be taken.

There was a light scattered trade during the week, mostly on the descriptions involved previous week, so that prices were not established on any more descriptions. Total movement so far this week amounted to 15,000 hides by two big packers, while local small packer association sold about 8,000 more.

Two packers each sold 4,000 June-July branded cows early in the week at 7½c, steady; a car native bulls sold at same time, at 5½c for June and 5c for Apr.-May take-off. On the second day of the week, one packer sold two cars extreme light native steers at 8c, while the small packer association sold about 8,000 hides, as mentioned below, including five cars light native cows at 8c for June-July take-off.

Late this week one packer is credited with selling 4,000 March to June light native cows at 7½c; while not confirmed as yet, the report is generally accepted among the trade; the dating and shipping point presumably had some effect on the price.

Market not yet established on other descriptions. Bids were reported early on basis of 9c for heavy native steers and 8c for Colorados, although small packer association secured 8½c for a car Colorados. Other descriptions than those involved in recent trading are quoted in a range, with inside figures representing last reported bids and top figures last trading prices, pending trading to establish values.

SMALL PACKER HIDES—Trading awaited to establish this market, with quotations only nominal around 7½@8c for local small packer native all-weight steers and cows and half-cent less for branded.

Local small packer association this week sold 1,000 extreme light native steers at 8c, 2,000 branded cows at 7½c five cars light native cows at 8c, and a car Colorados running a bit heavy average at 8½c, mostly steady prices but a bit better for Colorados than most bids; these were June-July take-off.

Last reported trade in Pacific Coast market, previous week, was some Apr.-May light and heavy hides at 6½c, flat, for steers and cows, f.o.b. Butchertown, presumably to a local tanner, since shipping has been tied up for over two months account longshoremen's strike.

FOREIGN WET SALTED HIDES—Fair trade in South American market at steady prices. A pack of 4,000 Uruguay steers sold late last week

equal to 8%@9½c, steady; 4,000 La-Platas sold to Germany at 50 pesos, equal to 8½c, c.i.f. New York, steady; later, 12,000 B. A. steers sold to United States at 50 pesos or 8½c, also steady.

COUNTRY HIDES—Trading in the country market continues more or less at a standstill; not much activity expected until the packer market on light cows is cleared up. Dealers cannot afford to sell hides at the prices obtainable, resulting in a lack of selling pressure on the market. All-weights quoted in a nominal way around 6½@6½c for trimmed and 6c untrimmed, selected, delivered Chicago. Heavy steers and cows 5@5½c, nom. Buff weights 6½@6¾c, nom., full value now. Extremes could be sold at 7½c, trimmed, but very hard to find anything offered under 8c. Bulls about 3½c; glues 4c. All-weight branded around 5@5½c, flat, less Chicago freight.

CALFSKINS—News from the meeting at Washington is awaited before trading can get under way in packer calfskins. Last trading was at 12½c for June light calf, under 9½-lb., and 14½c for May St. Louis heavies, 9½/15-lb. Some packers talk 12c for lights and up to 13½c for northern heavies, in a nominal way.

Three or four cars Chicago city heavy calfskins, 10/15-lb., sold early at 9½c, or ¼c over the price reported last week; bidding 8c for 8/10-lb. Outside cities quoted around 9@9½c for 8/15-lb.; mixed cities and countries 8@8½c; straight countries 7@7½c. Bidding 65c for Chicago city light calf and deacons, asking 70c.

KIPSKINS—One packer sold about 21,000 northern native kipskins late last week at 10½c; reports of trading in southerns at 9@9½c. About 2,700 Mar.-Apr. over-weights sold last week at 9c for northerns; some further quiet trading in over-weights this basis.

Chicago city kipskins are offered at 9½c, with nominal market around 9½c at present. Outside cities about 9@9½c, nom.; mixed cities and countries 8@8½c; straight countries about 7c.

One packer sold June production of regular slunks last week at 60c, steady.

HORSEHIDES—Market about steady, with good city renderers quoted \$2.90@3.15, mixed city and country lots \$2.65@2.90, with No. 2's at 50c less.

SHEEPSKINS—Dry pelts unchanged around 12c for full wools, short wools half-price. Shearlings at bit slow; last sale was 30,000 by one packer at 65c for No. 1's, 47½c for No. 2's, and 30c for clips, and some being offered at 60c, 50c, and 30c. Pickled skins also slow and generally quoted around \$4.00 @4.25 per doz. for current quality although a sale was reported late last week at \$4.50 per doz. at Chicago. Packer spring lambs generally quoted \$1.00 per cwt. live lamb, or 68@75c each; last sale at 97½c per cwt. Outside packer spring lambs 50@55c each.

New York.

PACKER HIDES—Market quiet and not yet established, pending news of the Washington meeting. Packers had moved their June native steers earlier at a premium. June Colorados and most of June butt brands still held.

CALFSKINS—Trading in calfskins this week on a fairly good scale, around 50,000 skins reported sold. Collectors sold 5-7's at 75c, or 15c down from last previous sales, and 7-9's at 90c, or 20c down. Packers sold 7-9's at \$1.00, or 25c off from last sales, and 9-12's at \$1.85, or 30c off.

CHICAGO HIDE MOVEMENT.

Receipts of hides at Chicago for the week ended July 14, 1934, were 3,762,000 lbs.; previous week, 3,852,000 lbs.; same week last year, 4,766,000 lbs.; from January 1 to July 14 this year, 127,106,000 lbs.; same period a year ago, 128,348,000 lbs.

Shipments of hides from Chicago for the week ended July 14, 1934, were 3,995,000 lbs.; previous week, 3,335,000 lbs.; same week last year, 4,734,000 lbs.; from January 1 to July 14 this year, 161,792,000 lbs.; same period a year ago, 149,238,000 lbs.

WEEKLY HIDE IMPORTS.

Imports of cattle hides at leading U. S. ports, week ended July 14, 1934:

Week ending.	New York.	Boston.	Phila.
July 14, 1934	30,300	68	
July 7, 1934	31,120	...	...
June 30, 1934	17,179	106	
June 23, 1934	22,351	24	...
	507,188	27,184	39,763
July 15, 1933	65,178	720	
July 8, 1933	58,109	2,129	...
	402,563	27,107	39,371

CHICAGO HIDE QUOTATIONS.

Quotations on hides at Chicago for the week ended July 20, 1934, with comparisons, are reported as follows:

PACKER HIDES.

Week ended	Prev. week.	Cor. week,
July 20.		1933.
Spr. nat.	9½@10½n	9½@10½n 15 @15½n
stra.	9½@10½n	9½@10½n 15 @15½n
Hvy. nat.	9 @10n	9½@10 @15
stra.	8 @10n	8 @10 @15
Hvy. Tex.	8½@10n	8½@10 @15
stra.	8½@10n	8½@10n @15
Hvy. butt brnd'd	8½@10n	8½@10n @15
stra.	8½@10n	8½@10n @15
Hvy. Col.	8 @9½n	8 @9½ @14½
Ex-light Tex.	8 @9½n	8 @9½ @14½
stra.	8 @7½	8 @7½ @13½
Brnd'd cows.	8 @7½	8 @7½ @13½
Hvy. nat. cows	8 @7½	8 @7½ @13½
lt. nat. cows	8 @8	8 @8n @14
Nat. bulls..	9½ @9½	5½ @6½ 11½ @12n
Brnd'd bulls..	4½ @4½	4½ @5½ 11½ @11½
Calfskin's ..	12 @12	12½ @14½ 21 @15
Kips, nat.	10½	12½ 17 @18n
Kips, ov-wt. 9	9½	11n 16 @17n
Kips, brnd'd.	8 @9½	10n 15 @16n
Slunks, reg.	6 @6	6 @6 @10
Slunks, hrs. 35	35 @50	35 @50 40 @50
Light native, butt branded and Colorado steers 1c per lb. less than heavies.		

CITY AND SMALL PACKERS.

Nat. all-wts. 7½@8n	7½n	@13½n
Brnd'd all-wts.	7½n	@13½n
Native wts. 5 @5½n	5 @5½n	5 @5½n 11 @11½n
Brnd'd bulls. 4½ @4½	4½ @5½	5 @5½n 10 @10½n
Calfskin's ...	8 @9½	8 @9½ 18 @20n
Kips	8 @9½	8 @9½ 15 @16n
Slunks, reg.	6 @6	6 @6 @10
Slunks, hrs. 35	35 @50	35 @50 40 @50

COUNTRY HIDES.

Hvy. steers..	5 @5½	5 @5½n 8 @9n
Hvy. cows	6½ @6½	6½ @6½ 10 @10½
Buffs	6½ @6½	6½ @6½ 11 @11½
Extremes ..	7½ @7½	7½ @7½ 11 @11½
Bulls	7 @7½	7 @7½ 12 @12½
Calfskin's ..	7 @7½	7 @7½ 12 @12½
Kips	7 @7½	7 @7½ 11 @11½
Light. calif. 25	25 @35n	25 @35n 50 @55
Deacons	25 @35n	25 @35n 50 @55
Slunks, reg.	20n	20n @20n
Slunks, hrs.	10n	10n @10n
Horsehides .	2.65@3.15	2.65@3.15 3.00@3.90

SHEEPSKINS.

Pkr. lambs.. 08	@75	68 @75 1.30@1.45
Sml. pkr.		
lambs ... 50	@55	50 @55 80 @90
Pkr. shearling.	@60	@65 @90
Dry pelts ...	@12	@12½ 14 @16

Live Stock Markets

CHICAGO

Reported by U. S. Bureau of Agricultural Economics.

Chicago, July 19, 1934.

CATTLE—Compared with last Friday: Fed steers and long yearlings, weak to 25c lower; grassy and warmed up steers, all representative weights, fully 25c off. Closing market was very dull at decline. Good to choice light and long yearling steers sold to better advantage than comparable weighty kinds, but demand early in week was fairly broad for all representative weights of strictly grainfed cattle. Practical top, \$10.00; prime, 1,286-lb. averages, \$10.35; bulk better grade weighty steers, \$8.50 upward; comparable light kinds, \$8.00 upward, best long yearlings reaching \$9.40, with part load \$9.50. All heifers sold active early, but closed dull and slightly lower; most fed heifers, \$6.00@7.00, top \$7.40, part load \$7.75; grass fat cows, 25@50c, mostly 50c lower; cutters, weak to 25c lower; bulls, about steady; vealers, 50c higher.

HOGS—Compared with last Friday: Market generally 10@15c lower, top of 10c; packing sows, steady; pigs, strong to 25c higher. Demand was dull and market sluggish all week, due mainly to draggy and lower fresh pork trade; week's top, \$5.00; closing peak, \$4.95; late bulk better grade 220 to 310 lbs., \$4.80@4.90; few 320 to 400 lbs., \$4.50@4.85; desirable 170 to 210 lbs., \$4.35@4.80; light lights, \$3.75@4.25; good pigs, \$3.00@3.50; packing sows, \$4.00@4.25, best \$4.35.

SHEEP—Compared with last Friday: Slaughter lambs, 25@50c lower, fat natives showing most decline. Sheep closed weak. Sluggish dressed trade and liberal supplies were dominating factors, although supplies somewhat reduced from last week. Week's lamb top, \$7.50 for natives; closing top, \$7.35 on fed Californias, with range lamb trade closing at \$7.25 downward and late bulk natives at \$7.00 and below; native throwouts, largely \$5.00@5.50. Range seconds closed at \$6.00; slaughter ewes, \$1.50@2.50; week's top, \$2.75.

KANSAS CITY

Reported by U. S. Bureau of Agricultural Economics.

Kansas City, Kans., July 19, 1934.

CATTLE—Supplies were increased materially as result of continued dry

weather, most of which were grass fat offerings. All killing classes were under pressure and rather sharp price declines were scored. Slaughter steers met limited demand and sold at 25@50c lower rates, inbetween grades of fed steers and straight grassers showing most of loss. Choice fed steers were practically absent, and the week's top rested at \$8.25. Bulk of fed steers and yearlings cashed from \$5.00@7.00. A few cake fed westerns sold from \$5.00@6.00. Straight grass fat kinds went from \$2.50@4.50. Desirable light weight heifers and mixed yearlings are 15@25c off. Other sheep declined 25@50c. Bulls, 25c lower. Vealers closed weak to 50c lower; late top, \$4.50.

HOGS—Closing values are mostly steady as compared with last Friday. Late top rested at \$4.60 on choice 200- to 250-lb. weights, bulk of good to choice 170- to 325-lb. weights going at \$4.25@4.60. Better grades of 140 to 170 lbs. ranged from \$3.25@4.25; plainier kinds, down to \$2.50 and below; packing sows, \$3.65@4.00.

SHEEP—Prices are 35@50c lower than last week's close. Week's top reached \$7.00 Monday on choice native, but at finish desirable grades cashed at \$6.50@6.60. Yearlings are 25@35c off. Better grades selling from \$4.50@5.15. Mature sheep held about steady, with \$1.50@2.00 taking most fat ewes.

CORN BELT DIRECT TRADING.

Reported by U. S. Bureau of Agricultural Economics.

Des Moines, Ia., July 19, 1934.

Prices of hogs at 22 concentration points and 7 packing plants in Iowa and Minnesota held well until mid-week, then broke to place current quotations 5@10c, with spots 15@20c, below last week's close. Current prices, good to choice 220 to 300 lbs., mostly \$4.20@4.45; numerous long-railed loads, \$4.50, few, \$4.55; 310 to 350 lbs., mostly \$3.95@4.35; 180 to 210 lbs., \$3.90@4.40; light and medium weight packing sows, \$3.50@3.85, few \$3.95; big weights, \$3.40 down.

Receipts unloaded daily for the week ended July 19 were as follows:

	This week.	Last week.
Fri., July 13.....	19,700	18,800
Sat., July 14.....	23,800	26,500
Mon., July 16.....	49,800	48,500
Tues., July 17.....	20,800	15,000
Wed., July 18.....	20,500	16,500
Thurs., July 19.....	24,600	21,100

OMAHA

Reported by U. S. Bureau of Agricultural Economics.

Omaha, Neb., July 19, 1934.

CATTLE—Steers average 25c lower, strictly choice heifers carrying weight, strong; others and cows, mostly 15@25c lower; bulls, 15@35c lower; vealers, weak to 50c lower. Strictly choice medium weight and heavy steers topped at \$9.00; several loads choice medium weights, \$8.00@8.50; bulk all weight steers and yearlings, \$5.50@7.50; grass steers and short feds, \$4.00@5.50; bulk heifers, \$5.25@6.50. Choice 1,000-lb. heifers topped \$7.35; bulk grass cows, \$2.00@2.50; few cows, up to \$4.00; cutter grades, \$1.25@1.75; medium bulls, \$2.40@2.75; vealers, \$4.00 down.

HOGS—Thursday's top \$4.45; bulk good and choice 180- to 325-lb. averages, \$4.00@4.40; medium grade 180 to 220 lbs. down to \$3.50; 140 to 180 lbs., \$3.25@4.25; medium grade, down to \$2.50; packing sows, mostly \$3.60@3.90; stags, \$2.50@3.25; pigs, \$1.75@3.00.

SHEEP—Comparisons with last Friday uncover a net lamb loss of 25@30c. Yearlings and aged sheep held steady. Thursday's sales good and choice range lambs \$6.25@6.75; bulk sorted native lambs, \$6.60; fed clipped lambs, \$6.60@6.75; fed Texas yearlings, \$5.15; good and choice ewes, \$1.75@2.50.

ST. LOUIS

Reported by U. S. Bureau of Agricultural Economics.

East St. Louis, Ill., July 19, 1934.

CATTLE—Mixed yearlings and heifers, 25@50c lower; cows and cutters, 50c lower; low cutters, sausage bulls and vealers, 25c lower. Bulk of steers brought \$5.00@7.65; 1,338- to 1,441-lb. steers, \$8.00; 1,048-lb. yearlings topped at \$7.75. Most mixed yearlings and heifers earned \$3.50@6.50; top heifers, \$6.85; best mixed yearlings, \$6.50. Most cows scored \$2.00@2.75; top, \$4.00; low cutters, largely \$1.00@1.35, some at 75c. The session closed with top sausage bulls at \$3.00; top vealers, \$4.75.

HOGS—Hog prices declined about 10c, while pigs suffered losses of 10@25c. Top for week was \$4.90, with bulk of hogs Thursday at \$4.65@4.85; pigs and light lights, \$2.50@4.25; packing sows, \$3.65@4.00.

SHEEP—Fat lambs and yearlings lost 25@50c, sheep holding steady. Fat lambs topped at \$7.00 to small killers, packers buying bulk for week at \$6.50@6.75; throwouts and medium grades, \$3.50@4.50; yearlings, \$5.00@5.50; fat ewes, \$1.50@2.00.

SIOUX CITY

Reported by U. S. Bureau of Agricultural Economics.

Sioux City, Ia., July 19, 1934.

CATTLE—Late trading indicated weak to 25c lower values. Small lots of choice medium weighty steers made \$8.75@8.85; load lots, \$8.50. Long yearlings stopped at \$8.40. Most steers and yearlings, \$5.50@7.50; better grade heifers, steady; others, weak to 25c lower; most beef cows, 25@40c lower. Load lots of choice heifers, up to \$6.75.

KENNETT-MURRAY

LIVESTOCK BUYING ORGANIZATION

Cincinnati, Ohio Indianapolis, Ind. Louisville, Ky. Lafayette, Ind. Montgomery, Ala. Sioux City, Ia.

Detroit, Mich. Dayton, Ohio Nashville, Tenn. Omaha, Neb.

beef cows bulked late at \$2.00@3.00; most cutters and low cutters, \$1.25@1.75; medium bulls \$2.85 down; yearlings, weak to 50c lower, with a \$4.50 practical top.

SHEEP—Buyers made an effort to reduce lamb values and were able to save 35@50c, while yearlings declined around 25c. Week's top reached \$6.90 on western lambs. Idahos and Utahs of good to choice quality cashed at \$6.50@6.65; native lambs, around \$6.50@6.65; slaughter ewes, steady to strong, with a few sales up to \$2.50 although most deals went at \$2.25 down.

HOGS—Most prices ranged 5@10c lower than last week. Week's top reached \$4.50 on sorted 250-lb. averages. Late bulk of better grade 210- to 310-lb. selections cashed at \$4.25@4.40; lighter weights, \$3.75@4.25; plainer kinds, down to \$3.00. Packing sows bulked at \$3.75@3.85, a few \$3.90.

ST. PAUL

By U. S. Bureau of Agricultural Economics and Minnesota Department of Agriculture.

So. St. Paul, Minn., July 18, 1934.

CATTLE—Slaughter cattle ruled mostly steady to 25c lower compared with Friday of last week. Cows and common or lower grade grass steers and heifers showed the decline. Bulls were unchanged; vealers mostly steady, spots 25c lower on grassy kinds. Good to choice slaughter yearling steers turned at \$5.50@7.50; extremes up to \$8.00. Finished weighty beefeves were scarce. Most western grass steers sold at \$2.75@4.50, with a few to \$5.00. Choice fed heifers brought \$6.00@6.85; medium to good grades, \$3.50@5.50; common grassers, \$2.25@3.25. Medium and good cows earned \$2.50@4.00; lower grades, \$1.00@2.25. Medium and good bulls realized \$2.50@3.25; plainer kinds, \$1.75@2.35. Better grade vealers cashed at \$4.00@5.00; some prime kinds at \$5.50.

HOGS—Better grade light and butcher hogs are selling around 10c higher than last Wednesday, packing sows around 25c higher. Better 170- to 325-lb. hogs are selling at \$4.25@4.50; heavier weights downward to \$4.10; better light lights, \$3.25@4.00; packing sows, \$3.80@4.00; fat pigs around \$2.75.

SHEEP—Slaughter lambs opened the week on a 25c lower basis, but held steady afterward, better natives today going at \$6.75; throwouts at \$3.75@

4.50. Slaughter ewes cleared largely at \$1.00@2.25. Range feeders were held around \$6.25 late.

CANADIAN LIVE STOCK PRICES.

Leading Canadian centers, top live-stock price summary, week July 12:

BUTCHER STEERS.

Up to 1,050 lbs.

	Week ended	Prev. week	Same week
Toronto	\$ 6.25	\$ 5.60	\$ 5.25
Montreal	5.75	5.75	5.25
Winnipeg	5.25	5.25	5.00
Calgary	4.50	4.65	4.65
Edmonton	4.50	4.50	4.50
Prince Albert	4.25	4.00	3.75
Moose Jaw	4.25	4.00	4.00
Saskatoon	4.25	4.75	4.25

VEAL CALVES.

	Week ended	Prev. week	Same week
Toronto	\$ 6.00	\$ 5.50	\$ 5.50
Montreal	5.00	5.00	4.50
Winnipeg	4.00	4.00	4.50
Calgary	4.50	4.50	4.50
Edmonton	3.25	3.50	4.00
Prince Albert	4.00	3.00	3.25
Moose Jaw	3.50	3.50	3.50
Saskatoon	3.00	3.50	3.50

SELECT BACON HOGS.

	Week ended	Prev. week	Same week
Toronto	\$ 9.00	\$ 9.65	\$ 6.00
Montreal	10.15	9.85	7.25
Winnipeg	9.25	8.85	6.75
Calgary	8.65	8.35	6.05
Edmonton	8.90	8.60	6.20
Prince Albert	8.85	8.45	6.45
Moose Jaw	9.00	8.60	6.50
Saskatoon	8.85	8.45	6.45

GOOD LAMBS.

	Week ended	Prev. week	Same week
Toronto	\$ 8.50	\$ 8.75	\$ 9.00
Montreal	7.80	8.00	8.25
Winnipeg	7.00	7.00	7.25
Calgary	6.00	6.50	6.00
Edmonton	5.00	5.50	4.50
Prince Albert	4.50	5.50	4.50
Moose Jaw	5.00	6.00	6.00
Saskatoon	4.50	5.50	3.50

RECEIPTS AT CHIEF CENTERS.

Combined receipts at principal markets, week ended July 14, 1934:

At 20 markets: Cattle. Hogs. Sheep.

	Week ended July 14	Previous week	July 14, 1933
20 markets	323,000	460,000	279,000
Previous week	221,000	376,000	220,000
1933	187,000	584,000	538,000
1932	198,000	456,000	380,000
1931	194,000	470,000	328,000
1930	197,000	557,000	276,000

Hogs at 11 markets:

	Week ended July 14	Previous week
1934	402,000	329,000
1933	504,000	370,000
1932	413,000	498,000
1931	544,000	544,000

At 7 markets: Cattle. Hogs. Sheep.

	Week ended July 14	Previous week	July 14, 1933
7 markets	250,000	353,000	177,000
Previous week	216,000	286,000	129,000
1933	145,000	438,000	172,000
1932	147,000	325,000	196,000
1931	154,000	276,000	217,000
1930	158,000	443,000	201,000
1929	156,000	468,000	226,000

LIVESTOCK PRICES COMPARED.

Livestock prices at Chicago during June, 1934, with comparisons:

	JUNE, 1934.	MAY, 1934.	JUNE, 1933.
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SLAUGHTER CATTLE AND VEALERS.

Steers—	550-900 lbs..	Choice ...	\$ 7.48	\$ 7.15	\$ 6.80
		Good	6.70	6.46	6.02
		Medium	5.56	5.61	5.10
		Common	4.26	4.82	4.29
	900-1,100 lbs..	Choice ...	8.62	8.04	6.90
		Good	7.34	6.91	6.04
		Medium	5.86	5.84	5.15
		Common	4.34	4.96	4.32
	1,100-1,300 lbs..	Choice ...	9.34	8.79	6.88
		Good	8.02	7.67	6.03
		Medium	6.80	6.61	5.23
	1,300-1,500 lbs..	Choice ...	9.13	9.08	6.68
		Good	8.55	8.11	5.90

Heifers—	550-750 lbs..	Choice ...	\$ 6.42	\$ 6.30	\$ 5.71
		Good	5.59	5.63	5.21
		Com.&med.	4.08	4.29	4.19
	750-900 lbs..	Good & ch.	6.19	6.12	5.44
		Com.&med.	4.12	4.43	4.23

Cows—	550-750 lbs..	Good	4.28	4.46	3.81
		Common & medium....	3.13	3.31	3.18
		Low cutter & cutter....	1.98	2.06	2.48

Bulls (yearlings excluded)—	Good (beef)	3.28	3.43	3.33
	Cutter, com. & med.	2.75	2.98	3.02

Vealers—	Good & choice....	4.94	5.97	5.24
	Medium	3.94	4.70	4.41
	Cull & common....	3.06	3.48	3.40

Calves 250-500 lbs.—	Good & choice....	5.10	4.75	4.48
	Common & medium....	3.30	3.50	3.36

HOGS.

Light light, 140-180 lbs.—	Good and choice....	3.76	3.27	3.99

Light weight—	160-180 lbs., good & ch.	4.05	3.49	4.30
	180-200 lbs., good & ch.	4.26	3.59	4.53

Medium weight—	200-220 lbs., good & ch.	4.43	3.64	4.59
	220-250 lbs., good & ch.	4.50	3.55	4.48

Heavy weight—	250-290 lbs., good & ch.	4.54	3.64	4.59
	290-350 lbs., good & ch.	4.50	3.55	4.48

Packing sows—	275-350 lbs., good	3.86	3.12	4.12
	350-420 lbs., good	3.75	3.00	3.95
	425-550 lbs., good	3.62	2.87	3.80
	275-550 lbs., medium	3.47	2.76	3.69

Slaughter pigs, 100-130 lbs.—	Good & choice....	2.88	2.46	3.36

Spring lambs—	Choice	8.96	10.62	...
	Good	8.44	9.06	...
	Medium	7.46	9.15	...

Lambs—	90 lbs. down, Gd. & ch.	8.43	7.64	...
	Com.&med.	7.22	6.20	...

90-98 lbs., Gd. & ch.	8.34	...

98-110 lbs., Gd. & ch.	6.68	7.41	5.82	...

PACKERS' PURCHASES

Purchases of livestock by packers at principal centers for the week ending Saturday, July 14, 1934, with comparisons, are reported to THE NATIONAL PROVISIONER as follows:

CHICAGO.

	Cattle.	Hogs.	Sheep.	
Armour and Co.	5,328	2,004	5,377	
Swift & Co.	6,044	2,786	9,485	
Morris & Co.	3,878	1,000	2,952	
Wilson & Co.	4,450	3,648	5,438	
Amer.-Amer. Prod. Co.	708	2,329	....
G. H. Hammond Co.	2,387	2,329	....
Libby, McNeill & Libby	19,663	16,588	793	
Shippers	28,882	33,130	7,530	
Others	28,882	33,130	7,530	
Brennan Pkg. Co.	4,676	hogs;	Hygrade Food Products Corp.	3,472 hogs;
Agar Pkg. Co.	4,384			
Total:	71,542	cattle,	*22,766 calves,	73,015 hogs; 31,885 sheep.
Not including 2,389 cattle, 1,588 calves, 41,839 hogs and 31,484 sheep bought direct.				
*Drought stock included.				

KANSAS CITY.

	Cattle.	Calves.	Hogs.	Sheep.
Armour and Co.	7,354	2,871	6,816	3,611
Cudahy Pkg. Co.	5,713	2,548	2,800	5,192
Morris & Co.	2,058	1,085	2,388	....
Swift & Co.	6,446	3,227	8,596	5,304
Wilson & Co.	5,735	2,163	3,591	4,339
Independent Pkg. Co.	331	....	....	....
Others	9,102	980	3,280	596
Total	38,406	12,874	25,414	21,431

OMAHA.

	Cattle and Calves.	Hogs.	Sheep.
Armour and Co.	9,026	10,449	3,773
Cudahy Pkg. Co.	9,263	8,629	7,192
Dold Pkg. Co.	1,961	6,804	....
Morris & Co.	2,985	2,017	1,020
Swift & Co.	10,458	7,280	3,600
Others	24,401	....	....
Eagle Pkg. Co.	27 cattle;	Geo. Hoffman Pkg. Co.	40 cattle; Grt. Omaha Pkg. Co.
Omaha Pkg. Co.	128 cattle;	J. Roth & Sons, 124 cattle;	So. Omaha Pkg. Co., 108 cattle; Lincoln Pkg. Co., 441 cattle; Sinclair Pkg. Co., 162 cattle; Wilson & Co., 700 cattle.
Total:	35,460 cattle and calves;	59,580 hogs,	15,594 sheep.

EAST ST. LOUIS.

	Cattle.	Calves.	Hogs.	Sheep.
Armour and Co.	2,482	3,273	4,959	8,516
Swift & Co.	3,604	4,953	4,772	8,356
Morris & Co.	1,283	1,494	1,354	....
Hunter Pkg. Co.	1,864	....	2,270	652
Heil Pkg. Co.	....	....	1,940	....
Krey Pkg. Co.	....	....	2,394	....
Laclede Pkg. Co.	247	3	947	....
Shippers	9,003	3,270	18,794	2,532
Others	2,455	315	14,547	981
Total	20,932	13,478	51,527	21,037

Not including 3,100 cattle, 6,529 calves, 38,544 hogs and 4,947 sheep bought direct.

ST. LOUIS.

	Cattle.	Calves.	Hogs.	Sheep.
Siehoff Pkg. Co.	17	46	1,060	....
Laclede Pkg. Co.	101	....	426	....
Krey Pkg. Co.	....	....	415	....
Glazer Pkg. Co.	....	24	....	4
Sokoloff Pkg. Co.	207	109	....	65
Staats Pkg. Co.	23	6	....	....
Shippers	62	310	1,895	1,783
Others	516	219	349	94
Total	926	714	3,945	1,946

ST. JOSEPH.

	Cattle.	Calves.	Hogs.	Sheep.
Swift & Co.	5,612	2,184	18,881	13,356
Armour and Co.	5,982	2,119	17,454	6,014
Others	3,079	70	997	....
Total	14,573	4,382	37,332	19,410

SIOUX CITY.

	Cattle.	Calves.	Hogs.	Sheep.
Cudahy Pkg. Co.	4,763	655	13,627	1,674
Armour and Co.	4,403	1,373	12,237	839
Swift & Co.	3,760	1,450	7,260	708
Shippers	1,779	....	9,066	....
Others	276	38	....	....
Total	14,983	3,525	42,220	3,241

OKLAHOMA CITY.

	Cattle.	Calves.	Hogs.	Sheep.
Armour and Co.	2,903	1,196	2,590	1,061
Wilson & Co.	2,900	1,171	2,680	1,231
Others	292	45	384	....
Total	*7,254	*2,978	5,654	2,262

Not including 90 cattle, and 2,568 hogs bought direct.

*Including 979 cattle and 566 calves for F.S.R.C.

DENVER.

	Cattle.	Calves.	Hogs.	Sheep.
Swift & Co.	2,174	445	2,470	9,937
Armour and Co.	1,650	102	3,039	13,525
Others	2,411	730	1,905	9,480
Total	6,235	1,367	7,414	32,942

WICHITA.

	Cattle.	Calves.	Hogs.	Sheep.
Cudahy Pkg. Co.	1,545	1,083	2,120	1,390
Dold Pkg. Co.	473	121	1,512	18
Wichita D. B. Co.	24	....	....	....
Dunn-Osterdag Co.	87	....	....	....
Fred W. Dold & Sons	98	....	418	....
Sunflower Pkg. Co.	90	....	143	....
Total	2,317	1,204	4,193	1,406

Not including 70 cattle and 3,063 hogs bought direct.

ST. PAUL.

	Cattle.	Calves.	Hogs.	Sheep.
Armour and Co.	3,238	4,457	9,512	4,516
Cudahy Pkg. Co.	498	1,762	....	....
Swift & Co.	4,800	6,748	14,052	3,284
United Pkg. Co.	2,318	127	....	....
Others	1,373	19	4,794	....
Total	*18,451	*10,687	28,558	7,800

*Includes 7,169 cattle and 3,574 calves bought by F. S. R. C.

MILWAUKEE.

	Cattle.	Calves.	Hogs.	Sheep.
Plankinton Pkg. Co.	2,263	5,213	7,882	1,576
U. D. B. Co., N. Y.	73	....	....	....
R. Gums & Co.	121	15	41	20
Armour & Co., MII.	563	2,643	....	....
Armour & Co., Chi.	292	....	....	....
N.Y.B.D.M. Co., N.Y.	40	....	....	....
Shippers	410	16	43	11
Others	715	613	13	236
Total	*5,435	*9,199	7,979	1,843

*Including 957 cattle and 690 calves for F.S.R.C.

INDIANAPOLIS.

	Cattle.	Calves.	Hogs.	Sheep.
Kingan & Co.	1,713	816	10,754	2,706
Armour and Co.	613	574	1,839	....
Hilgemeter Bros.	10	34	99	....
Brown Bros.	134	....	885	....
Stumpf Bros.	....	....	121	....
Meier Pkg. Co.	79	....	220	....
Indiana Prov. Co.	28	5	214	....
Schussler Pkg. Co.	30	1	246	....
Maas-Hartman	29	12	....	....
Art Wabnitz	29	42	....	42
Shippers	1,562	2,293	16,935	1,847
Others	857	85	128	135
Total	5,063	3,866	31,444	4,730

*Including 3,100 cattle, 6,529 calves, 38,544 hogs and 4,947 sheep bought direct.

CINCINNATI.

	Cattle.	Calves.	Hogs.	Sheep.
F. W. Gall's Sons.	23	....	533	....
Ideal Pkg. Co.	16	....	493	....
Kahn's Sons Co.	1,724	550	998	....
Kroger G. & B. Co.	141	124	998	....
J. Lohr Pkg. Co.	4	....	271	....
H. H. Meyer Pkg. Co.	27	....	3,194	....
A. Sander Pkg. Co.	6	....	....	....
J. & F. Schrot Pkg. Co.	22	....	....	....
John F. Stegner Co.	316	288	107	....
Shippers	77	862	1,904	10,034
Others	1,164	602	328	421
Total	3,733	2,751	14,406	13,433

Not including 1,491 cattle, 196 calves, 3,066 hogs and 956 sheep bought direct.

RECAPITULATION.

Recapitulation of packers' purchases by markets for week ended July 14, 1934, with comparisons:

CATTLE.

	Week ended July 14.	Cor.	Prev. week, July 14, 1933.
Chicago	71,542	47,147	36,407
Kansas City	36,406	28,827	22,160
Omaha	35,469	20,603	22,422
East St. Louis	20,852	12,263	11,229
St. Louis	14,573	10,163	6,032
St. Joseph	14,083	10,167	14,866
St. Paul	14,573	11,811	13,998
Milwaukee	5,435	5,640	3,963
Indianapolis	5,063	4,955	5,091
Cincinnati	3,733	2,996	2,855
Total	244,349	164,424	148,957

HOGS.

	Week ended July 14.	Cor.	Prev. week, July 14, 1
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RECEIPTS AT CENTERS

SATURDAY, JULY 14, 1934.

	*Cattle.	Hogs.	Sheep.
Chicago	1,500	7,000	3,000
Kansas City	1,500	1,300	1,000
Omaha	1,300	2,000	50
St. Louis	5,000	2,000	500
St. Joseph	900	2,000	500
Sioux City	3,500	2,000	100
St. Paul	4,500	900	800
Fort Worth	2,200	100	100
Denver	100	300	5,000
Louisville	100	400	200
Wichita	200	500	300
Indianapolis	100	2,000	100
Pittsburgh	100	600	200
Cincinnati	500	2,500	400
Buffalo	100	400	300
Nashville	200	500	900
Oklahoma City	300	800	100

MONDAY, JULY 16, 1934.

	*Cattle.	Hogs.	Sheep.
Chicago	21,000	27,000	11,000
Kansas City	26,000	8,500	4,000
Omaha	20,000	12,000	6,500
St. Louis	8,300	13,500	4,500
St. Joseph	7,500	8,000	3,500
Sioux City	27,200	8,500	6,000
St. Paul	15,000	3,500	1,000
Fort Worth	3,000	500	1,000
Milwaukee	1,000	2,500	200
Denver	2,100	1,200	14,900
Louisville	900	500	700
Wichita	900	1,000	500
Indianapolis	900	5,000	700
Pittsburgh	900	1,800	2,000
Cincinnati	300	500	900
Buffalo	1,000	2,400	1,400
Cleveland	900	700	1,000
Nashville	200	600	800
Oklahoma City	2,000	1,400	900

The above estimates include 5,000 government cattle at Chicago, 6,000 at Kansas City, 4,000 at Omaha, 2,500 at St. Louis, 4,000 at St. Joseph, 18,000 at Sioux City and 8,000 at St. Paul.

TUESDAY, JULY 17, 1934.

	*Cattle.	Hogs.	Sheep.
Chicago	14,000	21,000	6,000
Kansas City	16,000	6,000	5,000
Omaha	11,500	11,500	6,000
St. Louis	6,900	8,500	3,700
St. Joseph	3,300	10,000	3,000
Sioux City	4,000	8,500	1,500
St. Paul	4,300	4,500	800
Fort Worth	2,500	500	2,000
Milwaukee	500	1,000	300
Denver	800	800	12,100
Louisville	300	500	600
Wichita	500	400	700
Indianapolis	1,300	6,000	1,300
Pittsburgh	500	300	200
Cincinnati	500	2,300	2,400
Buffalo	100	500	300
Cleveland	200	300	500
Nashville	300	900	900
Oklahoma City	1,300	900	200

The above estimates include 5,000 government cattle at Chicago, 5,000 at Kansas City, 1,500 at Omaha, 900 at St. Louis, 600 at St. Joseph, 1,000 at Sioux City and 2,400 at St. Paul.

WEDNESDAY, JULY 18, 1934.

	*Cattle.	Hogs.	Sheep.
Chicago	14,000	23,000	11,000
Kansas City	14,000	7,000	5,000
Omaha	13,000	14,000	7,500
St. Louis	5,700	8,000	2,500
St. Joseph	2,000	9,500	4,000
Sioux City	7,500	7,000	2,000
St. Paul	3,200	4,500	2,500
Fort Worth	3,000	500	2,000
Milwaukee	800	1,500	300
Denver	900	1,000	9,200
Louisville	200	500	300
Wichita	500	700	500
Indianapolis	1,300	5,000	800
Pittsburgh	300	1,000	1,000
Cincinnati	500	3,700	1,500
Buffalo	300	300	300
Cleveland	300	200	500
Nashville	400	900	500
Oklahoma City	1,500	900	500

The above estimates include 4,000 government cattle at Chicago, 4,000 at Kansas City, 1,000 at Omaha, 2,200 at St. Louis, 500 at St. Joseph, 4,500 at Sioux City and 1,500 at St. Paul.

THURSDAY, JULY 19, 1934.

	*Cattle.	Hogs.	Sheep.
Chicago	13,000	20,000	10,000
Kansas City	10,000	6,000	4,000
Omaha	10,000	10,000	700
St. Louis	3,400	8,500	2,000
St. Joseph	2,600	8,500	1,200
Sioux City	8,000	8,500	7,500
St. Paul	9,000	3,500	7,600
Fort Worth	2,000	400	1,000
Milwaukee	1,000	1,200	300
Denver	700	1,300	15,000
Louisville	300	800	400
Wichita	400	900	400
Indianapolis	700	5,000	800
Pittsburgh	100	500	800
Cincinnati	1,400	3,800	400
Buffalo	300	400	100
Cleveland	400	400	500
Nashville	100	900	300
Oklahoma City	1,400	900	400

The above estimate includes 3,000 government cattle at Chicago, 4,000 at Kansas City, 1,000 at Omaha, 500 at St. Louis, 400 at St. Joseph, 5,500 at Sioux City and 7,000 at St. Paul.

FRIDAY, JULY 20, 1934.

	*Cattle.	Hogs.	Sheep.
Chicago	12,500	16,000	6,000
Kansas City	5,500	5,500	1,500
Omaha	5,200	12,000	4,000

LIVESTOCK PRICES AT LEADING MARKETS.

Livestock prices at five leading Western markets, Thursday, July 19, 1934, as reported by the U. S. Bureau of Agricultural Economics:

LIVESTOCK PRICES AT LEADING MARKETS.							
as reported by the U. S. Bureau of Agricultural Economics:							
CHICAGO. E. ST. LOUIS. OMAHA. KANS. CITY. ST. PAUL.							
L. Lt. (140-180 lbs.) gd-ch.....\$ 3.75@ 4.35							
L. Lt. (160-180 lbs.) gd-ch.....4.20@ 4.70							
(180-200 lbs.) gd-ch.....4.50@ 4.80							
Med. wt. (200-220 lbs.) gd-ch.....4.65@ 4.85							
(220-250 lbs.) gd-ch.....4.75@ 4.90							
(250-290 lbs.) gd-ch.....4.85@ 4.95							
(290-330 lbs.) gd-ch.....4.95@ 4.95							
Pkg. sows (250-350 lbs.) good.....4.15@ 4.35							
(425-550 lbs.) good.....3.90@ 4.10							
(275-350 lbs.) medium.....3.50@ 4.00							
Sltr. pigs (100-130 lbs.) gd-ch.....3.00@ 3.75							
Av. cost & wt. wed. (pigs excl.) 4.60-246 lbs. 4.66-216 lbs. 4.00-231 lbs. 4.19-213 lbs.							

STEERS (550-900 lbs.):							
Choice	6.50@	8.25	6.50@	8.00	6.00@	7.75	5.75@ 7.50
Good	5.75@	7.50	5.50@	7.50	5.25@ 7.00	5.00@ 6.75	5.50@ 7.25
Medium	4.25@	6.00	4.00@	6.00	3.75@ 5.50	3.75@ 5.50	4.15@ 5.75
Common	2.75@	4.50	2.75@	4.00	2.50@ 4.00	2.25@ 3.75	2.50@ 4.35

STEERS (900-1100 lbs.):							
Choice	7.50@	9.25	7.50@	8.75	7.00@ 9.25	6.75@ 8.25	7.25@ 8.85
Good	6.00@	8.00	6.00@	8.25	5.50@ 7.50	5.50@ 7.50	6.25@ 7.75
Medium	4.50@	6.50	4.00@	6.25	4.00@ 6.00	3.75@ 5.75	4.35@ 6.15
Common	2.75@	5.00	2.75@	4.25	2.25@ 4.00	2.00@ 3.75	2.25@ 4.00

STEERS (1100-1300 lbs.):							
Choice	8.00@	10.00	8.25@	9.35	7.75@ 9.25	7.25@ 8.75	7.75@ 9.25
Good	6.50@	9.00	6.25@	8.50	6.00@ 8.25	5.75@ 7.75	6.25@ 8.50
Medium	5.00@	7.25	4.25@	7.25	4.75@ 6.75	4.00@ 6.25	4.60@ 6.65
Common	2.25@	4.00	2.25@	3.50	2.00@ 2.75	1.75@ 2.75	2.00@ 3.00

HEIFERS (550-750 lbs.):							
Choice	6.00@	7.00	6.25@	7.50	5.75@ 6.75	5.75@ 6.50	5.85@ 6.85
Good	5.25@	6.00	5.25@	6.25	4.75@ 5.75	4.85@ 5.75	4.75@ 5.85
Medium	2.25@	5.50	2.25@	5.25	2.00@ 4.75	2.00@ 4.85	2.25@ 4.75
Common	2.50@	5.50	2.50@	5.50	2.25@ 5.25	2.25@ 5.00	2.50@ 5.00

CALVES (750-900 lbs.):							
Gd-ch	5.50@	7.25	5.25@	7.00	5.00@ 6.60	4.75@ 6.70	5.25@ 7.00
Com-med	5.20@	5.50	5.00@	5.30	4.75@ 5.50	4.50@ 5.50	5.00@ 5.50
COWS:							
Good	3.00@	4.75	3.00@	3.75	2.75@ 4.00	2.50@ 3.50	3.25@ 4.15
Com-med	2.00@	3.25	1.75@	3.00	1.85@ 2.75	1.50@ 2.50	2.00@ 3.25
Low-cut-cut	1.00@	2.00	1.75@	1.75	1.00@ 1.85	.50@ 1.50	1.00@ 2.00

BULLS (yrls. ex. beef):			
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CHICAGO SECTION

Vice president D. J. Donohue of the Cudahy Packing Company is enjoying a vacation in the North Woods.

G. H. Harrer, secretary, Jacob E. Decker & Sons, Mason City, Iowa, was in Chicago during the past week.

John F. Goaman, of the market branch of the British Ministry of Agriculture, London, England, was a visitor to Chicago this week.

Charles S. Hughes, president and general manager, Hughes-Curry Packing Co., Anderson, Ind., spent several days of the past week in Chicago.

Frank W. Zuncker, of Vette & Zuncker, has recovered from a recent illness, and is again welcomed by his many friends in trade circles.

Charles W. Dieckmann, the "Old Timer," is enjoying a motor trip to the Southwest, West and the Pacific Coast, with Mrs. Dieckmann as chaperon.

J. F. Nelson, manager of the Armour and Company branch at Charleston, W. Va., has been visiting the World's Fair this week in company with Mrs. Nelson.

Samuel Stretch, the spice man, landed in Chicago this week, along with another heat wave, although he cannot be accused of having brought such discomfort to his friends.

L. L. Lauck, sales manager of the Little Rock Packing Co., Little Rock, Ark., was in Chicago this week greeting old friends and taking in the attractions of A Century of Progress.

C. L. Ashley, formerly general manager of the Armour plant at Fargo, N. D., has been made assistant to O. A. Anderson, manager of the industrial engineering department of Armour and Company.

Purchases of livestock at Chicago by principal packers for the first four days of this week totaled 23,985 cattle, 8,339 calves, 43,723 hogs and 17,191 sheep (not including cattle and calves slaughtered for FSRC).

Provision shipments from Chicago for the week ended July 14, 1934, with comparisons, were as follows:

	Week July 14.	Previous week.	Same week. '33.
Cured meats, lbs.	20,635,000	20,581,000	15,316,000
Fresh meats, lbs.	41,293,000	37,380,000	41,378,000
Lard, lbs.	4,656,000	3,025,000	4,226,000

James B. Leddy, district auditor for Armour and Company in charge of branch house auditing in the Charlotte, N. C., territory, died on July 19 at Clifton Springs, N. Y. Mr. Leddy had been with Armour and Company for thirty-four years.

CROP DAMAGE IS HEAVY.

Despite recent rains over most of the drought area, the losses of early crops and pastures cannot be recovered fully, according to the Bureau of Agri-

cultural Economics in a special report on the drought situation as of July 1. Deficiency of moisture early in the year still constitutes a great handicap to the revival of pastures, meadows, and in the growth of the late-planted emergency crops, it is stated.

Heavy slaughter of cattle during the next six months will probably be followed by decreased slaughter during the first half of 1935. Supplies of pork also will be considerably smaller next year on account of the large reduction in this year's pig crop, the bureau states.

Earlier statements that the national food supply has not been significantly reduced and that the principal effect of the drought is in a reduction of feed and forage for livestock, are repeated. Local shortage of certain food crops will be met by shipments from surplus producing areas.

The drought was particularly severe on bread grains, principally wheat. Production of butter and cheese may be reduced, and shortages of feed crops and resultant higher feed prices are likely to curtail the production of eggs and chickens, says the bureau.



HERRICK LEAVES BRENNAN.

Charles E. Herrick has announced his resignation as president of the Brennan Packing Company, Chicago, effective September 1. His future plans are not decided on, except that he will take advantage of the opportunity to enjoy a good rest. He has been an active executive of the Brennan Packing Company for more than 28 years, and during that period has been constantly on duty, except for periods when he was abroad as chairman of a packers' committee in connection with export relations in Great Britain and on the Continent.

He was a director of the American Meat Packers' Association and the second president of the Institute of American Meat Packers, succeeding Thomas E. Wilson in that office. He has served for many years as chairman of the Institute's Committee on Foreign Relations and Trade, and is an authority in the provision trade.

PACKER AND FOOD STOCKS.

Price ranges of packers', leather companies', chain stores' and food manufacturers' listed stocks, July 18, 1934, or nearest previous date, with number of shares dealt in during week, and closing prices, July 11, 1934:

	Sales.	High.	Low.	—Close.—
	Week ended July 18.	July 18.—	July 11.	July 11.
Amal. Leather.	100	4	4	4
Do. Pfd.	.....	.....	.....	28%
Amer. H. & L.	100	6½	6½	6½
Do. Pfd.	.....	.....	.....	25%
Amer. Stores.	600	43½	43	43
Armour Ill. N. 13,300	5%	5½	5½	5½
Do. Pfd. N.	4,600	59½	59½	59½
Do. Pfd.	3,400	70½	70	70
Do. Del. Pfd.	700	92½	92½	92½
Beechnut. H. C.	100	65½	65½	65½
Do. Pfd.	.....	.....	.....	50
Check. Co. Oil.	1,000	27½	27½	27½
Childs. C. 800	5½	5½	5½	5½
Cudahy Pack.	400	46½	46½	46½
First Nat. Strs.	1,800	68½	68½	68½
Gen. Foods.	14,300	31%	31½	31½
Gobel Co.	2,800	5%	5½	5½
Gr.A.&P.1stPfd.	140	128½	126½	126½
Do. New.	100	136½	136½	136½
Hormel. G. A.	100	18	18	18
Hygrade Food.	500	4	4	4
Kroger G. & B.	2,400	31	30%	30%
Libby McNeill.	3,100	5	5	5
McMarr Stores	.....	.....	.....	5%
Mayer, Oscar.	.....	.....	.....	5%
Mickelberry Co.	100	1%	1%	1%
M. & H. Pfd.	200	45%	45	45
Nat. Fd. Pd. A.	.....	.....	.....	14%
Do. B.	.....	.....	.....	14%
Nat. Leather.	1,800	11½	11½	11½
Nat. Tea.	4,600	11½	10½	11½
Proc. & Gamb.	3,300	37	36%	36%
Do. Pr. Pfd.	140	112	112	114
Rath Pack.	.....	.....	.....	20%
Safeway Strs.	3,000	51½	51	51½
Do. 6% Pfd.	180	105	104	106
Do. 7% Pfd.	310	110½	110	110½
Stahl Meyer	.....	.....	.....	5%
Swift & Co.	20,050	18½	18	18
Do. Int'l.	7,300	35½	33	33½
Truax Pork	200	10%	10½	10½
U. S. Cold Stor.	.....	.....	.....	20%
U. S. Leather.	1,000	7½	7½	7½
Do. Pfd.	300	12½	12½	12½
Do. Pr. Pfd.	.....	.....	.....	5%
Wesson Oil	3,600	25	25	25
Do. Prd.	1,000	61	61	61
Wilson & Co.	800	7%	7½	7½
Do. A.	8,000	24	23½	23½
Do. Pfd.	1,100	82	82	82

KROGER SALES INCREASE.

Sales of the Kroger Grocery & Baking Co. for the first six periods of 1934 totaled \$101,456,700.60 compared with \$91,997,867.55 in the like period of 1933, an increase of 10.3 per cent. Earnings for the period, however, showed a decrease of \$9,274.07, amounting to \$2,285,520.20 as against a net of \$2,294,794.27 in the six periods of last year.

On June 16, 1934, the company had in cash and government securities \$11,877,896.43 against \$10,842,693.90 a year earlier, an increase of \$1,035,202.53. The average number of stores in operation this year was 4,565 against 4,673 last year.

COST OF FERTILIZER CODE.

Cost of administering the code of the fertilizer industry from November 1, 1933 to June 30, 1934 is placed at \$130,041.65, while the proposed budget for the fiscal year ended June 30, 1935 is figured at \$219,929, plus an additional sum not exceeding \$30,000 for the purpose of any additional zone work that might be undertaken. Assessments are computed on the tonnage of the preceding fiscal year ending June 30. The fertilizer recovery committee of the fertilizer association has made application to the NRA Administrator for approval of the budgets for the periods above stated.

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NINTH AND NOBLE STREETS
PHILADELPHIA

PROVISION BROKER

HARRY K. LAX, General Manager

Member of New York Produce Exchange
and Philadelphia Commercial Exchange

CHAIN STORE SALES HIGHER.

Sales in chain store groceries for the first six months of 1934 were 7 per cent higher than those of the like period of 1933, according to a report made by the U. S. Department of Commerce. This result is based on reports from 70 per cent of the grocery chains which showed, also, that daily sales for June were 4½ per cent higher than those of a year ago.

KROGER NET CUT BY NRA.

Net profits of the Kroger Grocery and Baking Co. for the 24 weeks ended June 16 totaled \$2,285,520. This compared with net profits of the like period of last year of \$2,394,794. President A. H. Morrill, commenting on the results of the period, said that higher costs due to operation under the NRA and other factors accounted for the decline in the net.

HOG CUTTING TEMPERATURES.

What are proper temperatures for cutting hogs? See "PORK PACKING," The National Provisioner's latest book.

PERISHABLE FREIGHT HEARING.

Subjects listed below will be given consideration by the National Perishable Freight Committee at a shippers' public hearing to be held at committee headquarters, room 308, Union Station building, 516 W. Jackson Blvd., Chicago, Illinois, on Tuesday, July 31st, 1934, commencing at 9:00 a. m. Central standard time.

Shippers desirous of presenting their views may appear before the committee or communicate with the chairman prior to the date mentioned.

No. 3110—Charges on shipments stored in transit.

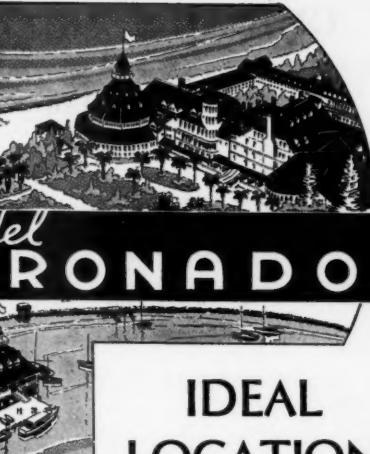
No. 3111—Handling shipments under icing, refrigeration, ventilation, during winter season.

No. 3219—Protective service against cold at hold points and destination on perishable freight.

No. 3221—Protective service against cold at hold points and destination on perishable freight.

No. 3223—Carriers re-icing in body of car.

No. 3226—Allowing shippers to give icing instructions after arrival at destination.



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CORONADO BEACH, CALIFORNIA

No. 3229—Transporting pre-iced shipments cooled by shipper at point of origin.

No. 3231—Re-icing precooled shipments in transit California to interstate.

No. 3236—Handling individual cars via San Diego & Arizona Eastern Railway Co.

No. 3238—Detention charges on shipments reconsigned moving under carriers' protective service against cold.

ARGENTINE BEEF EXPORTS.

Cable reports of Argentine exports of beef this week up to July 20, 1934, show exports from that country were as follows: To the United Kingdom, 129,920 quarters; to the Continent, 29,283. Exports the previous week were: To England, 22,557 quarters; to Continent, 18,911.

LARD AND GREASE EXPORTS.

Exports of lard from New York City, July 1, 1934, to July 18, 1934, totaled 2,368,466 lbs.; tallow, none; greases, none; stearine, 73,200 lbs.

SMITH, BRUBAKER & EGAN

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CHICAGO PROVISION MARKETS

Reported by THE NATIONAL PROVISIONER DAILY
MARKET SERVICE

FUTURE PRICES.

SATURDAY, JULY 14, 1934.

	Open.	High.	Low.	Close.
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LARD—

July	7.02½	7.05	7.07½	7.02½
Sept.	7.30	7.32½	7.37½	7.30
Oct.	7.47½	7.47½	7.45	7.45
Nov.	7.55		7.55	10-12
Dec.	7.65	7.72½	7.65	7.67½ ax
Jan.	7.77½	7.80	7.75	7.75b

CLEAR BELLIES—

July	10.00	10.07½	10.00	10.07½ b
Sept.	10.30		10.30ax	10.30ax

MONDAY, JULY 16, 1934.

LARD—

July	7.02½	7.07½ b	7.07½ b	
Sept.	7.37½	7.37½	7.37½	8-10
Oct.	7.47½	7.47½	7.45	10-12
Nov.	7.55		7.55	12-14
Dec.	7.65	7.72½	7.65	7.67½ ax
Jan.	7.75		7.75	10-16 range

CLEAR BELLIES—

July	10.07½	10.00	10.07½ b	
Sept.	10.30		10.30ax	10.30ax

TUESDAY, JULY 17, 1934.

LARD—

July	7.02½	7.07½ b	7.07½ b	
Sept.	7.35	7.35	7.25	7.25b
Oct.	7.35-32½	7.45	7.32½	7.40ax
Nov.			7.50ax	8-10
Dec.	7.60	7.65	7.60b	10-12
Jan.	7.70	7.77½	7.70	7.72½ ax

CLEAR BELLIES—

July	10.07½	10.00	10.07½ b	
Sept.	10.30		10.30ax	10.30ax

WEDNESDAY, JULY 18, 1934.

LARD—

July	7.21½	7.30	7.22½	7.22½ ax
Sept.	7.42½	7.42½	7.35	7.35ax
Oct.	7.42½	7.42½	7.40	8-10
Nov.			7.47½	10-12
Dec.	7.62½	7.62½	7.57½	12-14
Jan.	7.72½	7.72½	7.70	7.70ax

CLEAR BELLIES—

July	10.00		10.00b	
Sept.			10.25ax	10.25ax

THURSDAY, JULY 19, 1934.

LARD—

July	7.22½	7.22½	7.22½	7.00ax
Sept.	7.42½	7.42½	7.35	7.35ax
Oct.	7.40	7.40	7.35	7.40ax
Nov.	7.45	7.47½	7.45	7.47½ ax
Dec.	7.60	7.62½	7.55	7.57½ ax
Jan.	7.72½	7.72½	7.70	7.70ax

CLEAR BELLIES—

July	10.00		10.00b	
Sept.			10.25ax	10.25ax

FRIDAY, JULY 20, 1934.

LARD—

July	7.25	7.30	7.20	7.00b
Sept.	7.40	7.45	7.37½	7.37½ ax
Oct.	7.40	7.40	7.35	7.40ax
Nov.	7.45	7.47½	7.45	7.47½ ax
Dec.	7.60	7.62½	7.55	7.60b
Jan.	7.77½	7.77½	7.70	7.70ax

CLEAR BELLIES—

July	10.00		10.00n	
Sept.			10.25n	10.25n

Key: ax, asked; b, bid; n, nom; —, split.



CASH PRICES.

Based on actual carlot trading Thursday,
July 18, 1934.

REGULAR HAMS.

Green. *S.P.

14½ 13½

14½ 13½

15½ 14½

15½ 14½

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CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.

Carcass Beef.

	Week ended	Cor. week,	
Prime native steers—	July 19, 1934.	1933.	
400-600	12½@13½	11½@12	
600-800	12½@12½	11@11½	
800-1000	14½@15½	9½@9¾	
Good native steers—		2@4	
400-600	10%@11%	9½@10½	
600-800	11½@11½	9@9½	
800-1000	13@13½	8½@9¼	
Medium steers—			
400-600	10½@11	9@9¾	
600-800	10%@11½	8½@9	
800-1000	12@12½	8½@8¾	
Heifers, good, 400-600	11	9@11	
Cows, 400-600	6½@9	6@6½	
Hind quarters, choice		16½	
Fore quarters, choice		11	

Beef Cuts.

Steer loins, prime.....	unquoted	@22
Steer loins, No. 2.....	@24	@19
Steer loins, prime.....	unquoted	@20
Steer short loins, No. 1.....	@47	@25
Steer short loins, No. 2.....	@41	@24
Steer loin ends (hips).....	@21	@15
Steer loin ends, No. 2.....	@19	@14
Cow loins.....	@16	@13
Cow short loins.....	@20	@14
Cow loin ends (hips).....	@12	@12
Steer ribs, prime.....	unquoted	@14
Steer ribs, No. 1.....	@21	@13
Steer ribs, No. 2.....	@19	@12
Cow ribs, No. 2.....	@11	6½
Cow ribs, No. 3.....	@10	6
Steer round, prime.....	unquoted	@10½
Steer round, No. 2.....	@14	9½
Steer rounds, No. 2.....	@13½	9½
Steer chuck, prime.....	unquoted	@10
Steer chuck, No. 1.....	@10	6½
Steer chuck, No. 2.....	9½	9
Cow rounds.....	9½	6½
Cow chuck.....	6½	6
Steer plates.....	6½	5½
Medium plates.....	6	3½
Briskets, No. 1.....	@10	@10
Steer navel ends.....	@5	2½
Cow navel ends.....	@3	3
Foie shanks.....	5	4
Hind shanks.....	4	4
String loins, No. 1, bns.....	@6	5
Sirloin butts, No. 1.....	@22	20
BEEF tenderloins, No. 1.....	@60	55
BEEF tenderloins, No. 2.....	@50	50
Bump butts.....	@18	15
Flank steaks.....	@18	14
Shoulder clods.....	8½	8½
Hanging tenderloins.....	8	5½
Insides, green, 6½@8 lbs.....	@10½	@10
Outsides, green, 5@6 lbs.....	@8½	8
Knuckles, green, 5@6 lbs.....	@8½	8

Beef Products.

Brains (per lb.).....	@ 5
Hearts.....	@ 5
Tongues.....	@17
Sweetbreads.....	@19
Ox-tail, per lb.....	@ 5
Fresh tripe, plain.....	@ 4
Fresh tripe, H. C.....	@ 8
Livers.....	@13
Kidneys, per lb.....	@ 8

Veal.

Choice carcass.....	9 @10
Good carcass.....	7 @ 8
Good saddles.....	10 @13
Good racks.....	6 @ 8
Medium racks.....	4 @ 5

Veal Products.

Brains, each.....	@ 7
Sweetbreads.....	@24
Calf livers.....	@25
	@30

Lamb.

Choice lambs.....	@15
Medium lambs.....	@15
Choice saddles.....	@20
Medium saddles.....	@15
Choice fores.....	@12
Medium fores.....	@11
Lamb fries, per lb.....	@25
Lamb tongues, per lb.....	@12
Lamb kidneys, per lb.....	@25

Mutton.

Heavy sheep.....	@ 4
Light sheep.....	@ 3
Heavy saddles.....	@ 5
Light saddles.....	@ 6
Heavy fores.....	@ 9
Light fores.....	@ 3
Mutton legs.....	@ 6
Mutton loins.....	@10
Mutton stew.....	@ 8
Sheep tongues, per lb.....	@ 4
Sheep heads, each.....	@10

Fresh Pork, Etc.

Pork loins, 8@10 lbs. av.	@14
Picnic shoulders.....	@10
Skinned shoulders.....	@11
Tenderloins.....	@23
Spare ribs.....	@ 6½
Back fat.....	@ 8½
Boston butts, cellar trim, 2@4	@13
Hocks.....	@11
Tails.....	@ 6
Neck bones.....	@ 2
Shank bones.....	@ 5
Blade bones.....	@ 7
Pigs' feet.....	@ 3
Kidneys, per lb.	@ 5½
Livers.....	@ 7
Brains.....	@ 6½
Snouts.....	@ 5
Heads.....	@ 4

DOMESTIC SAUSAGE.

(Quotations cover fancy grades.)

Pork sausage, in 1-lb. cartons.....	@22½
Country style sausage, fresh in links.....	@16½
Country style sausage, fresh in bulk.....	@13½
Country style sausage, smoked.....	@17½
Frankfurts in sheep casings.....	@17
Frankfurts in hog casings.....	@15
Bologna in beef bungs, choice.....	@14½
Bologna in beef middies, choice.....	@14½
Liver sausage in beef pounds.....	@14
Smoked liver sausage in hog bungs.....	@17½
Liver sausage in hog bungs.....	@14½
Head cheese.....	@15
New England luncheon specialty.....	@20½
Minced luncheon specialty, choice.....	@17
Tongue sausage.....	@24
Blood sausage.....	@16
Souse.....	@17
Polish sausage.....	@16½

DRY SAUSAGE.

Cervelat, choice, in hog bungs.....	@36
Thuringer cervelat.....	@16½
Farmer.....	@25
Holsteiner.....	@24
B. C. salami, choice.....	@34
Milano salami, choice, in hog bungs.....	@34
B. C. salami, new condition.....	@17½
Frisses, choice, in hog middies.....	@29
Genoa style salami.....	@37
Papetta.....	@28
Mortadella, new condition.....	@27
Carnevale.....	@26
Italian style hams.....	@28
Virginia hams.....	@32

SAUSAGE MATERIALS.

(F.O.B. CHICAGO, cariot basis.)

Regular pork trimmings.....	6
Special lean pork trimmings.....	12
Extra lean pork trimmings.....	14½
Pork cheek meat.....	7
Pork hearts.....	4½
Pork livers.....	4½
Native boneless bull meat (heavy).....	6½
Boneless chucks.....	5½
Shank meat.....	5
Beef trimmings.....	4½
Beef cheeks (trimmed).....	4½
Dressed canners, 350 lbs. and up.....	3½
Dressed cutter cows, 400 lbs. and up.....	4½
Dr. bolonga bulls, 600 lbs. and up.....	5½
Beef tripe.....	2½
Pork tongue, canner trim, S. P.	17½

SAUSAGE CASINGS.

(F.O.B. CHICAGO.)

Beef casings:	
Domestic rounds, 180 pack.....	@30
Domestic rounds, 140 pack.....	@45
Export rounds, wide.....	@42
Export rounds, medium.....	@42
Export rounds, narrow.....	@48
No. 1 weasands.....	@07
No. 2 weasands.....	@05
No. 1 bungs.....	@15
No. 2 bungs.....	@11
Middles, regular.....	1.05
Middles, select wide, 2@2½ in. diam.	1.40
Middles, select extra wide, 2½ in. and over	1.85@1.75
Dried bladders:	
12-15 in. wide, flat.....	1.10
10-12 in. wide, flat.....	1.00
8-10 in. wide, flat.....	.60
6-8 in. wide, flat.....	.40
Hog casings:	
Narrow, per 100 yds.....	2.10
Narrow, special, per 100 yds.....	1.80
Medium, regular.....	1.70
Wide, per 100 yds.....	1.50
Extra wide, per 100 yds.....	1.85
Export bungs.....	.26
Large prime bungs.....	.21
Medium prime bungs.....	.12
Small prime bungs.....	.08
Middles, per set.....	.16
Stomachs.....	.08

SAUSAGE IN OIL.

Bologna style sausage in beef rounds—	
Small tins, 2 to crate.....	\$2.25
Large tins, 1 to crate.....	5.75
Frankfurt style sausage in sheep casings—	
Small tins, 2 to crate.....	6.25
Large tins, 1 to crate.....	7.00
Smoked link sausage in hog casings—	
Small tins, 2 to crate.....	5.50
Large tins, 1 to crate.....	6.25

DRY SALT MEATS.

Clear bellies, 18@20 lbs.....	@10½
Clear bellies, 14@16 lbs.....	@10½
Rib bellies, 25@30 lbs.....	@10½
Fat backs, 10@12 lbs.....	@7½
Fat backs, 14@16 lbs.....	@7½
Regular plates.....	@2½
Butts.....	@ 6

WHOLESALE SMOKED MEATS.

Fancy reg. hams, 14@16 lbs.....	17½@19
Smoked skinned hams, 14@16 lbs.....	18@20
Standard reg. hams, 14@16 lbs.....	17@18
Picnics, 4@8 lbs., short shank.....	11½@12
Picnics, 4@8 lbs., long shank.....	10@11
Fancy bacon, 6@8 lbs.....	19½@20
Standard bacon, 6@8 lbs.....	18@17
No. 1 ham, ham sets, smoked.....	
Insides, 8@12 lbs.....	21
Outsides, 5@9 lbs.....	16½
Knuckles, 5@9 lbs.....	18
Cooked hams, choice, skin on, fattened.....	23
Cooked hams, choice, skinless, fattened.....	22½
Cooked picnics, skin on, fattened.....	23
Cooked picnics, skinless, fattened.....	22½
Cooked loin roll, smoked.....	30

BARRELED PORK AND BEEF.

Mess pork, regular.....	@23.00
Family back pork, 24 to 34 pieces.....	22.50
Family back pork, 35 to 45 pieces.....	19.00
Clear back pork, 40 to 50 pieces.....	23.00
Clear plate pork, 25 to 35 pieces.....	20.00
Bracket pork.....	16.50
Beam pork.....	14.50
Plate beef.....	12.00
Extra plate beef, 200 lb. bbls.....	13.00

VINEGAR PICKLED PRODUCTS.

Regular tripe, 200-lb. bbl.....	\$12.00
Money market tripe, 200-lb. bbl.....	16.00
Pocket honeycomb tripe, 200-lb. bbl.....	19.00
Pork feet, 200-lb. bbl.....	15.50
Pork tongues, 200-lb. bbl.....	33.00
Lamb tongues, short cut, 200 lb. bbl.....	40.00

LARD.

Prime steam, cash, f.d. Trade.....	@\$7.05
Prime steam, loose, f.d. Trade.....	@ 6.40
Refined lard, tapers, f.o.b. Chicago.....	8½
Kettle rendered, tapers, f.o.b. Chgo.....	8½
Leaf lard, tapers, f.o.b. Chgo.....	8½
Neutral, in tapers, f.o.b. Chicago.....	8½
Compound, vegetable, tapers, c.a.r.....	7½

OLEO OIL AND STEARINE.

Extra oleo oil.....	6½@ 7

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RETAIL SECTION

Local Meat Inspection

Seattle Law Covers Entire Trade Including Meat Grading

COMPLETE regulation of the production and sale of meat—from packer to retail shop—is provided in an ordinance recently adopted by the city of Seattle, Wash., and now in effect. This amends an ordinance passed in May, 1931, which provided for the inspection of meat, regulated and licensed the preparation, handling and sale of meats and created a meat inspection fund.

The amending ordinance—designed to protect the legitimate meat industry as well as the consumer—licenses all persons handling meats, requires adequately-equipped wholesale and retail meat establishments, bars all uninspected meats, and makes meat grading compulsory, according to U. S. Department of Agriculture standards.

Retail Licenses.—Any person desiring to become a meat salesman must make application to the Examining Board for Meat Salesmen, pay an examination fee of \$5.00 and submit to and pass an examination qualifying him to sell meat within the city limits. In addition he must pass such health tests as the health commissioner may require.

His examination will test his cleanliness, his ability and competency in the handling of meat, and his ability "by the senses" to recognize in meat ptomaines and other taints and conditions deleterious to health. If he passes this examination successfully he will be granted a "certificate of competency" which will be serially numbered.

Those engaged in the sale of meat at the time the ordinance became effective were given thirty days in which to make their application and pass the examination. The certificates are good until June 30 following their issuance. During June of each year each person holding such a license will be required to submit to prescribed health tests.

It is unlawful for any retailer to employ a person without such certificate, or one who has failed to comply with the annual health tests. Provision is made for revocation of the certificates for sufficient cause.

Wholesalers and Packers Licensed.—Wholesale meat establishments are required to secure from the commissioner of health an official wholesale meat shop

establishment number, which must be used to mark all meat received in the establishment and sold by it. It is unlawful not to so mark the meat, which must also carry either the federal inspection stamp or the official establishment number of a slaughterhouse licensed under the ordinance.

Provision is made whereby slaughterhouses more than one mile beyond the city limits may be licensed, so that meat produced in these plants can be sold in the city. The license fee for such establishments is \$200 per annum.

Persons desiring to engage in the wholesale meat business must secure a license, application for which must specify the name and location of the slaughterhouse where his animals will be dressed. The license, when granted, will permit the wholesaler to sell to anyone other than a consumer. Fixtures and equipment used by the licensee in the transportation and sale of meat must meet the requirements of the city health department.

If guilty of fraud in the sale of meat the wholesaler's license can be revoked. The wholesale license fee is \$250 per annum.

Meat Must be Graded.—All beef, lamb and mutton sold in the city must be classified and graded according to government standards which are re-

peated in detail in the ordinance. The position of chief meat grader is established in the department of health, whose duty it is supervise the grading and marking of beef, lamb and mutton and to see that no meat is sold within the city limits without such grading. This person must be licensed by the Bureau of Agricultural Economics of the U. S. Department of Agriculture.

False Advertising.—False advertising in relation to meat is prohibited, and advertisements must specify the class and grade of meat. Shoulders of pork weighing over 11 lbs. or hams weighing over 14 lbs. cannot be designated as "big pork" or "young pork," nor can a piece be designated as "half a ham" if a center slice has been cut from the ham. No lamb can be designated as "spring lamb" between the first of October and the 1st of December of any year.

"Hamburger" is defined in the ordinance to be "ground lean beef, containing no offal or added water and no fats, other than lean beef." Heart, liver, tongue and tripe are regarded as "offal" within the meaning of the ordinance. In addition, it is necessary to mark plainly on the invoice or bill rendered for it the class and grade of beef from which the hamburger is made.



RESTAURANTS COOPERATE IN PROMOTING MEAT CONSUMPTION.

A campaign designed to educate the public to a freer use of meat, prepared in cooperation with the Institute of American Meat Packers, has been launched by the Wil-Low Cafeterias, one of New York's largest restaurant chains.

Display material on cuts of beef and the origin of these cuts, together with information on the dietary advantages of meat, is being exhibited in the company's restaurants under a schedule that will eventually carry the message to every metropolitan district served by the chain.

Above is a sample of this model educational display now being used in this restaurant chain.

Sausage Regulations.—Regulations surrounding the sale of pork sausage are quite specific. They provide that "it shall be unlawful to sell, offer or expose for sale, or to advertise for sale, or to manufacture for sale or consumption in the city, any sausage made from uncooked meat as, or represented as, 'pork sausage,' 'home-made sausage,' 'farm sausage,' 'sausage meat,' 'bulk sausage,' or 'sausage' with or without any other descriptive word, which has been or is adulterated."

Such sausage is deemed adulterated if it contains cereal, added coloring matter, a greater amount of water than the meats from which it is prepared contained in their fresh condition, antiseptic or preservative other than salt, sugar or pure spices; meat or meat products other than pork; decomposed, contaminated or unwholesome pork; and more than 30 per cent of back fat.

Meat Peddling and Sunday Selling.—Meat peddling is prohibited, and Sunday selling of meat is prohibited.

Other clauses relate to the revocation of licenses and causes therefor, appeals and other details having to do with the administration of the ordinance which became effective 30 days after its approval on May 31, 1934.

Meat Inspection Fund.—A meat inspection fund is established into which is paid 75 per cent of all license fees paid to the city under the provisions of the ordinance. This fund is to be used in paying the expenses incurred by the department of health and sanitation in the enforcement of the provisions of the ordinance relating to meat inspection and the classification and grading of meat.

Retail meat dealers in Portland, Ore., are reported to have favored the enactment of regulations in Portland similar to those now in effect in Seattle. I. J. Ringer, a member of the board of the National Association of Retail Meat Dealers, was active in the campaign which resulted in the adoption of this ordinance.

SELLING YOUR STORE.

There's a lot these hot days in selling your store.

How to do it is a matter of psychology, arrangement, common sense and energy.

Put yourself in your customers' place, and visualize the type of store you would like to enter.

The floor should be cool and clean smelling, which means keeping it thoroughly swept, and now and then sprinkled.

Your customer wants things well arranged and clean to handle. See that the counters are free from dust and dirt, and that the packaged and canned specials displayed are easy to handle and that they look like being plucked into the market basket and taken home.

Common sense in the summer means a darkened store, dark enough to shut out the glare of the sun, but not so dark that everything cannot be easily seen. It means clerks who look cool

JUNE FRESH MEAT PRICES COMPARED

Chicago.

Wholesale fresh meat prices for June, 1934, with comparisons:

	June, 1934.	May, 1934.	June, 1933.
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BEEF.

Steer—	300-500 lbs.,	Choice \$10.68	\$11.38	\$ 9.75
	Good	9.55	10.12	8.78
	Medium	8.49	9.88	8.19
	Common	7.48	7.97	7.54
500-600 lbs.,	Choice 10.92	11.36	9.05	8.00
	Good	9.80	10.12	8.78
	Medium	8.53	8.88	8.19
	Common	7.51	7.97	7.34
600-700 lbs.,	Choice 11.82	12.00	9.39	8.39
	Good	10.80	10.98	8.62
	Medium	9.55	9.88	7.84
700 lbs. up,	Choice 12.35	12.44	9.38	8.38
	Good	11.35	11.44	8.61
Cow—	Choice 7.75	8.22	7.48	7.48
	Good	6.55	7.15	6.50
	Medium	5.62	6.13	5.51

VEAL AND CALF CARCASSES.

Veal—	Choice 9.52	10.48	9.18	
	Good	8.09	9.20	8.18
	Medium	6.51	7.92	6.91
	Common	5.52	6.92	5.74

CALF—

Good .....	.....	.....	.....	.....
Medium .....	.....	.....	.....	.....
Common .....	.....	.....	.....	.....

LAMB AND MUTTON.

Spring lamb—	Choice 18.15	19.86	.....
	Good	16.91	18.80	.....
	Medium	14.72	17.48	.....

Lamb—

38 lbs. down,	Choice	18.60	15.10	
	Good	15.68	14.02	
	Medium	13.64	12.68	
	Common	12.07	10.60	

39-45 lbs.,	Choice	18.60	15.32	
	Good	17.66	14.00	
	Medium	16.64	12.54	
	Common	12.07	10.65	

46-55 lbs.,	Choice	18.24	.....
	Good	17.04	.....

Yearling—

40-55 lbs.,	Choice	16.61	12.94	
	Good	14.84	11.41	
	Medium	9.75	.....

Mutton (ewe)—

70 lbs. down,	Good	6.58	9.34	6.29
	Medium	5.55	7.64	5.29
	Common	4.52	6.18	4.31

FRESH PORK.

Hams—	10-14 lbs. avg.....	13.85	12.06	10.58
Loins—	.....	.....	.....	.....

8-10 lbs. avg.....	13.59	12.48	7.42	
10-12 lbs. avg.....	13.46	12.48	7.41	
12-15 lbs. avg.....	12.35	11.47	6.85	
16-22 lbs. avg.....	11.45	10.67	6.44	

Shoulders, N. Y. style, skinned.

8-12 lbs. avg.....	9.45	8.47	5.63	
Butts, Boston style.	.....	.....	.....

4-8 lbs. avg.....	11.95	10.60	6.89	
Spareribs, half sheet.....	5.99	6.00	3.80	

Picnics—

6-8 lbs. avg.....	.....	.....	.....
Butts, Boston style.	.....	.....	.....

4-8 lbs. avg.....	12.59	11.83	8.39	
Spareribs, half sheet.....	7.41	7.84	5.79	

New York.

Wholesale fresh meat prices for June, 1934, with comparisons:

	June, 1934.	May, 1934.	June, 1933.
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BEEF.

Steer—	300-500 lbs.,	Choice \$12.76	\$12.57	\$10.18
	Good	11.76	11.47	9.06
	Medium	9.95	9.90	7.59
	Common	7.98	7.98	7.18
500-600 lbs.,	Choice 13.11	12.72	10.18	
	Good	12.09	11.78	9.58
	Medium	10.19	10.01	7.98
	Common	8.08	8.08	7.24
600-700 lbs.,	Choice 13.28	12.79	9.95	
	Good	12.30	11.83	8.95
	Medium	10.28	10.07	7.89
700 lbs. up,	Choice 13.52	13.15	9.50	
	Good	12.46	12.02	8.82
Cow—	Choice 9.89	9.80	7.88	
	Good	8.46	8.60	7.19
	Medium	6.83	6.99	6.42

VEAL AND CALF CARCASSES.

Veal—	Choice 10.95	12.26	10.55	
	Good	9.06	10.68	8.80
	Medium	7.52	9.39	7.49
	Common	6.25	8.24	6.44

Calf—

Good .....	.....	.....	.....	.....
Medium .....	.....	.....	.....	.....
Common .....	.....	.....	.....	.....

LAMB AND MUTTON.

Spring lamb—	Choice 19.20	21.55	.....
	Good	17.29	20.26	.....
	Medium	14.98	18.87	.....

Lamb—

38 lbs. down,	Choice	20.01	15.94	
	Good	18.95	14.69	
	Medium	17.59	12.86	
	Common	16.08	10.82	

39-45 lbs.,	Choice	19.45	15.44	
	Good	18.73	14.69	
	Medium	17.41	12.89	
	Common	16.08	10.94	

46-55 lbs.,	Choice	18.16	14.98	
	Good	17.37	14.04	

Yearling—

40-55 lbs.,	Choice	16.63	12.12	
	Good	14.82	10.89	
	Medium	12.22	9.31	

70 lbs. down,	Good	7.60	9.06	5.80
	Medium	6.29	8.27	4.80
	Common	4.80	6.82	3.82

FRESH PORK.

Hams—	10-14 lbs. avg.....
Loins—

8-10 lbs. avg.....	14.
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NEW YORK NEWS NOTES.

Vice president W. J. Cawley, Wilson & Co., Chicago, was in New York last week.

Edward Seh, by-products sales department, Wilson & Co., New York, is spending a few weeks in the Adirondacks with his family.

J. H. Lawrence, manager, Jacob Dold Packing Company, New York, enjoyed his motor trip to Detroit and Chicago so much that he is planning a similar trip next week.

Meat and poultry seized and destroyed by the health department of the city of New York during the week ended July 14, 1934, were as follows: Meat—Brooklyn, 447 lbs.; Manhattan, 408 lbs.; Queens, 1,879 lbs.; Richmond, 4 lbs.;

total, 2,738 lbs. Poultry—Manhattan, 81 lbs.; Queens, 369 lbs.; total, 450 lbs.

Visitors to New York during the past week included Philip L. Reed, vice president and treasurer; F. A. Becker, assistant treasurer, and William Lexier, provision department, Armour and Company, Chicago.

W. F. Scheck, advertising department, and M. J. Irish, beef, lamb and veal department, Swift & Company, Chicago, were in New York last week. K. D. Fogg, beef department, Swift & Company, central office, New York, is vacationing on the New Jersey shore.

Frank T. Boyd, who has been connected with the meat packing industry for many years, has opened an office in the Produce Exchange building, New

York City, where he will handle packhouse products and provisions on a brokerage basis. Mr. Boyd has a wide circle of friends in the trade.

Their many friends in the meat industry will be glad to know that Charles, William and Albert Rohe, of Rohe & Brother fame, have opened an office at 1819 Broadway, New York. Albert T. Rohe is planning to attend the annual packers' convention in October, at which time he hopes to renew old acquaintances.

AMONG NEW YORK RETAILERS.

Last meeting of South Brooklyn Branch for the summer was held Tuesday. In addition to the regular routine business, delegates to the national convention were selected. They are Joseph Rossman and John Harrison.

Fred Berg and E. E. Barton of Los Angeles, Cal., representatives from their city at the recent open hearing on the retail meat code in Washington, are seeing the sights in and around New York before attending the national convention in Baltimore, August 6. Mr. Berg is accompanied by his wife.

It is reported that Rudolf Schumacher and his son Harold are on the road to recovery.

LIVE POULTRY CODE COSTS.

Live poultry code enforcement in the New York metropolitan area is expected to cost \$88,997.85 for the fiscal year beginning May 1, 1934, according to a budget submitted to the NRA for approval. This is to be collected at the rate of 2c per hundred pounds of sales from commission merchants, brokers, receivers and jobbers, and 2c per fifty pounds of sales from wholesale and retail slaughterhouses. Pigeons and guinea fowl would be assessed at the rate of 2c per dozen head sold. Each member of the industry would contribute a minimum of \$1 per week. The budget's largest item is salaries, totaling \$57,500. The set up includes the code supervisor and his assistant, legal counsel, a force of 10 inspectors and 10 office employees.

MEAT IMPORTS AT NEW YORK.

Principal meat imports at New York for the week ended July 14, 1934:

Point of origin.	Commodity.	Amount.
Argentina—Canned beef	1,944 lbs.	
Brazil—Canned corned beef	73,000 lbs.	
Canada—Bacon	1,961 lbs.	
Czecho-Slovakia—Sausage	944 lbs.	
Czecho-Slovakia—Hams	26 lbs.	
England—Meat products	125 lbs.	
Germany—Hams	6,362 lbs.	
Germany—Sausage	6,028 lbs.	
Germany—Bacon	542 lbs.	
Germany—Pork loins	124 lbs.	
Holland—Sausage	2,700 lbs.	
Holland—Ham	1,780 lbs.	
Italy—Sausage	1,397 lbs.	
Italy—Ham	637 lbs.	
Poland—Sausage	10,000 lbs.	
Poland—Bacon	1,132 lbs.	
Poland—Meat products	2,914 lbs.	
Switzerland—Bouillon cubes	5,164 lbs.	
Switzerland—Soup powder	1,785 lbs.	
Uruguay—Canned corned beef	408,000 lbs.	

WHEN YOU WANT TO BUY.

Watch the "Wanted" and "For Sale" page for business opportunities and bargains in equipment.

(1) Includes heifer 450 lbs. down at Chicago. (2) Includes "skins on" at New York and Chicago.

(3) Includes sides at Boston and Philadelphia.



Heekin Cans

Attractive, colorful, lithographed cans certainly create an impression of quality. Today, neither the dealer nor the consumer wants merchandise of any kind that is not packed in an attractive container. For years Heekin has served packers with lithographed cans for every requirement. Today Heekin personal service is ready to assist you in making your present can more beautiful . . . more attractive for the purchaser. Write for information.

The Heekin Can Co.

Cincinnati, Ohio



STOCKINETTE

BAGS and TUBING for
Beef — Lamb — Ham — Sheep
Pigs — Cuts — Calves — Franks, Etc.
DESIGNED BY BAG MAKERS
WITH PACKINGHOUSE EXPERIENCE

E.S. HALSTED & CO., Inc.
64 PEARL ST., NEW YORK CITY
Joseph Wahlman, Dept. Mgr.
(Formerly with Armour & Company)

Makers of Quality Bags Since 1876

Hindquarter Bag

For Quality Meat Products

KUTMIXER

Write for
circular



THE HOTTMANN
MACHINE CO.
3325 ALLEN STREET

PHILADELPHIA, PA.

I.C. Co.
SHURSTITCH
Sewed
CASINGS

Importers

SAUSAGE CASINGS

Exporters

New York London Hamburg

INDEPENDENT CASING COMPANY
1335 West Forty-Seventh Street, Chicago, Illinois

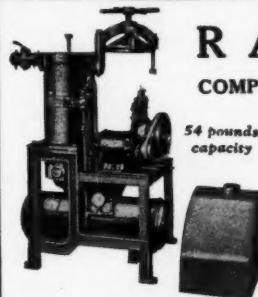
W. Y.
New York
1934:

Amount	
1,564 lbs.	
72,000 lbs.	
1,928 lbs.	
644 lbs.	
216 lbs.	
112 lbs.	
6,352 lbs.	
8,000 lbs.	
542 lbs.	
124 lbs.	
2,700 lbs.	
1,700 lbs.	
1,507 lbs.	
637 lbs.	
10,000 lbs.	
1,122 lbs.	
2,304 lbs.	
5,161 lbs.	
1,768 lbs.	
468,000 lbs.	

TO BUY.
d "For Sale"
tunities and

Provisioner

Week ending July 21, 1934



RANDALL

COMPRESSED AIR STUFFER

Saves time, labor and space
for the smaller packer.
Especially designed for
smaller plants; simple to
install and operate. Entirely
self-contained and
fully shielded. Complete
details gladly sent. Write!

R. T. RANDALL & CO.

Equipment for Sausage Makers
331 N. Second St. Philadelphia, Pa.

"HALLOWELL" PACKING PLANT EQUIPMENT



Pat. applied for

Fig. 1081 — "Hallowell"
Pork Loin Truck

Incorporates every up-to-date improvement; is perfectly sanitary and so sturdy and strong it will outwear other makes. Furnished heavily galvanized or of Monel Metal, as preferred.

Write for BULLETIN 449 covering our complete line of "HALLOWELL" Packing Plant Equipment.

**STANDARD
PRESSED STEEL CO.**
Jenkintown, Pa.
Box 550

For Slicing

Search no further if you want a high quality dried beef that makes full, even slices. Peacock Dried Beef is manufactured and trimmed with the slicer's problem in mind. Write for prices.

Cudahy Brothers Co.
Cudahy, Wis.



Peacock Dried Beef

NEW YORK MARKET PRICES

LIVE CATTLE.

Grain and grass fed steers.....	\$ 7.75
Cows, common to medium.....	3.25@ 4.25
Bulk bulls	3.00@ 3.75

LIVE CALVES.

Vealers, good and choice	\$ 6.50@ 7.50
Vealers, medium	4.50@ 5.50
Vealers, common	@ 3.50

LIVE LAMBS.

Lambs, good and choice.....	\$ 7.50@ 8.00
Lambs, medium	6.00@ 7.00
Ewes	\$ 3.00 down

LIVE HOGS.

Hogs, 196 lb.....	\$ @ 5.15
Hogs, 320 lb.....	@ 4.75
Pigs, 85-110 lb., medium	2.75@ 3.25

DRESSED HOGS.

Hogs, 90-140 lb., good to choice.....	\$ 9.75@ 9.87
---------------------------------------	---------------

DRESSED BEEF.

Choice, native, heavy.....	14 @ 15
Choice, native, light.....	13 1/2@ 14 1/2
Native, common to fair.....	@ 13

WESTERN DRESSED BEEF.

Native steers, 600@800 lbs.....	13 @ 13 1/2
Native choice yearlings, 440@600 lbs.....	13 @ 14
Good to choice heifers.....	11 @ 12
Good to choice cows.....	9 @ 10
Common to fair cows.....	7 @ 8
Fresh bologna bulls.....	8 1/2@ 7 1/2

BEEF CUTS.

	Western.	City.
No. 1 ribs.....	16 @ 18	19 @ 21
No. 2 ribs.....	15 @ 17	17 @ 18
No. 3 ribs.....	12 @ 14	15 @ 16
No. 1 loins.....	23 @ 27	25 @ 28
No. 2 loins.....	20 @ 23	20 @ 23
No. 3 loins.....	16 @ 18	16 @ 18
No. 1 hinds and ribs.....	17 @ 19	18 @ 20
No. 2 hinds and ribs.....	15 @ 17	15 @ 17 1/2
No. 1 rounds.....	13 @ 14	13 1/2@ 14 1/2
No. 2 rounds.....	12 @ 13	12 @ 12
No. 3 rounds.....	11 @ 12	11 @ 12
No. 1 chuck.....	11 @ 12	11 @ 12
No. 2 chuck.....	9 @ 10	10 @ 11
No. 3 chuck.....	8 @ 9	9 @ 10
Bologna.....	6 1/2@ 7 1/2	7 @ 8
Rolls, reg. 66@88 lbs avg.....	22	23
Rolls, reg. 46@51 lbs avg.....	17	18
Tenderloins, 4@6 lbs avg.....	50	60
Tenderloins, 5@6 lbs avg.....	50	60
Shoulder clods.....	11	12

DRESSED VEAL.

Good	8 @ 10
Medium	7 @ 8
Common	5 @ 6

DRESSED SHEEP AND LAMBS.

Lambs, prime to choice	18 @ 19
Lambs, good	16 @ 17
Lambs, medium	13 @ 14
Sheep, good	7 @ 8
Sheep, medium	4 @ 5

FRESH PORK CUTS.

Pork loins, fresh, Western, 10@12 lbs.	14 @ 14 1/2
Pork tenderloins, fresh.....	25 @ 26
Pork tenderloins, frozen.....	22 @ 23
Shoulders, Western, 10@12 lbs. avg.....	11 @ 12
Butts, boneless, Western.....	15 @ 16
Butts, regular, Western.....	14 @ 14 1/2
Hams, Western, fresh, 10@12 lbs. avg.....	15 @ 16
Picnic hams, Western, fresh, 8@8 lbs. avg.....	10 @ 11
Pork trimmings, extra lean	14 @ 15
Pork trimmings, regular 50% lean.....	8 @ 8 1/2
Spareribs	7 @ 8

SMOKED MEATS.

Hams, 8@12 lbs. avg.....	19 @ 20
Hams, 10@12 lbs. avg.....	19 @ 20
Hams, 12@14 lbs. avg.....	19 @ 20
Picnics, 4@6 lbs. avg.....	12 1/2@ 13 1/2
Picnics, 6@8 lbs. avg.....	12 1/2@ 13 1/2
City pickled bellies, 8@12 lbs. avg.....	15 @ 17
Bacon, boneless, Western.....	20 @ 21
Bacon, boneless, city.....	18 @ 20
Roulottes, 8@10 lbs. avg.....	15 @ 17
Beef tongue, light.....	22 @ 25
Beef tongue, heavy.....	24 @ 26

FANCY MEATS.

Fresh steer tongues, untrimmed.....	15c a pound
Fresh steer tongues, l. e. trm'd.....	30c a pound
Sweetbreads, beef	30c a pound
Sweetbreads, veal	6c a pair
Beef kidneys	5c a pound
Mutton kidneys	10c each
Liver, beef	15c a pound
Oxtails	20c a pound
Beef hanging tenders.....	20c a pound
Lamb fries	10c a pair

BUTCHERS' FAT.

Shop fat	75c per cwt.
Breast fat	110c per cwt.
Edible suet	61.50 per cwt.
Inedible suet	61.25 per cwt.

GREEN CALFSKINS.

5-9 9 1/2-12 1/2 12 1/2-14 14-18 18 up	
Prime No. 1 veals.	7 1.30 1.40 1.45 1.70
Prime No. 2 veals.	6 1.15 1.25 1.30 1.45
Buttermilk No. 1... 5 1.05 1.15 1.20 ...	
Buttermilk No. 2... 4 .95 1.05 1.10 ...	
Branded gruby	3 .65 .75 .80 .90
Number 3	3 .65 .75 .80 .90

BUTTER.

Creamery, extras (92 score)	22 1/2
Creamery, firsts (91 score)	22 1/2
Centralized (90 score)	22

EGGS.

(Mixed Colors.)

Special packs or henney selections	19 @ 22 1/2
Standards	18 1/2@ 18 1/2
Firsts	16 1/2@ 17

LIVE POULTRY.

Fowls, colored, via express	13 @ 15
Lephorns	12 @ 13
Broilers, Rocks, fancy	24 @ 25

DRESSED POULTRY.

FRESH KILLED.

Fowls—fresh—dry packed—12 to box—	
Western, 60 to 65 lbs. to dozen, lb.	15 @ 18
Western, 48 to 54 lbs. to dozen, lb.	13 @ 16 1/2
Western, 43 to 47 lbs. to dozen, lb.	12 @ 15 1/2
Western, 36 to 42 lbs. to dozen, lb.	11 @ 14
Western, 30 to 35 lbs. to dozen, lb.	11 @ 14

CHICKENS, FRESH:

Nearby	20 @ 28
Chickens—frozen—12 to box—	

Western, 66 lbs. up	21 @ 26
Western, 60 to 65 lbs. to dozen, lb.	21 @ 26
Western, 55 to 59 lbs. to dozen, lb.	20 @ 25
Western, 48 to 54 lbs. to dozen, lb.	19 @ 24
Western, 43 to 47 lbs. to dozen, lb.	18 @ 23
Western, 36 to 42 lbs. to dozen, lb.	17 @ 23
Western, 30 to 35 lbs. to dozen, lb.	16 @ 22

DUCKS—

Spring, L. I., per lb.....	14 1/2@ 15
Graded, per lb.....	23 @ 30

TURKEYS, FROZEN:

Young toms	17 @ 27
Young hens	17 @ 22

BUTTER AT FOUR MARKETS.

Wholesale prices of 92 score butter at Chicago, New York, Boston, Philadelphia and San Francisco, week ended July 12, 1934:

Chicago	23 1/2
N. Y.	24 1/2
Boston	25
Phila.	25 1/2
San Fran.	23

Wholesale prices carlots—fresh centralized butter 90 score at Chicago:

23 1/2
23 1/2
23 1/2
23 1/2
23 1/2

Receipts of butter by cities (tubs):

This week.	Last week.	Since Jan. 1.
July 12.	July 12.	1933.

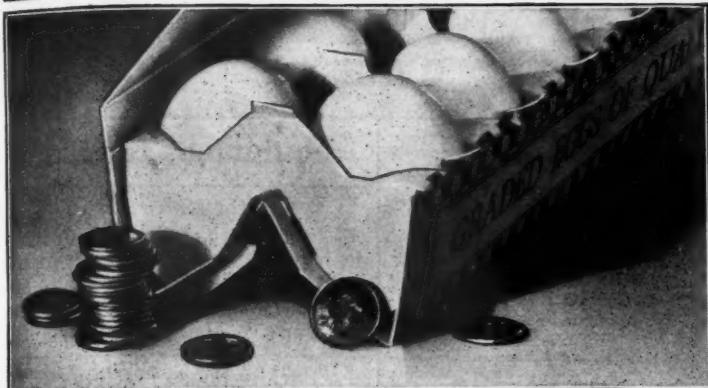
Chicago	19,456,954
N. Y.	5,656,363
Boston	3,588,902
Phila.	5,557,284
San Fran.	5,515,236

Total	157,088
Cold storage movement (lbs.):	

In	Out	On hand	week day
July 12.	July 12.	last year.	

Chicago	344,610
N. Y.	177,476
Boston	102,893
Phila.	87,848
San Fran.	28,790

EXTRA PENNIES



PROFIT WHEN YOU USE THIS CARTON

A Few Well Known Users

Swift & Company
Armour and Company
Wilson & Co.
Morris & Co.
Cudahy Packing Co.
National Tea Co.
American Stores Co.
Young's Market Co., Inc.

Southern Grocery Stores, Inc.
Economy Grocery Stores Corp.
The Kroger Grocery & Baking Co.
Washington Co-op. Egg & Poultry Assn.
Beatrice Creamery Co.
The Fairmont Creamery Co.
Golden State Milk Products Co.
Bordens Farm Products Co.
Bowman Dairy Co.
Land-O'-Lakes Creamery,

EGGS packed in SELF LOCKING Cushion Cartons are not chained down to current market prices; you can get an extremely liberal premium above the market. That's because this package makes EGGS LOOK like they are WORTH MORE money. It clearly conveys the atmosphere of class, of superiority—and folks have always been glad to pay EXTRA for these features.

Standardize on SELF LOCKING Cushion Cartons and enjoy extra pennies profit on every dozen.

Free samples gladly sent upon request.

SELF-LOCKING EGG CUSHION CARTONS G
SELF-LOCKING CARTON CO.
589 E. Illinois St. CHICAGO Phone Superior 3887

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to make the best*
WORCESTER SALT
● America's oldest
refiners of pure salt

WORCESTER SALT COMPANY
NEW YORK, U.S.A.

CLASSIFIED ADVERTISEMENTS

Advertisements on this page, \$2.00 an inch for each insertion. Position Wanted, special rate, \$2.00 an inch for each insertion. Minimum Space 1 inch, not over 48 words, including signature or box number.
No display. Remittance must be sent with order.

Position Wanted

Sausage Foreman

Now available, expert sausagemaker, German, who desires permanent position with large packer as foreman. Wide practical experience manufacturing all kinds high-quality sausage, specialty loaves, and delicatessen. Can handle men and department to advantage and operate at profit. Good references. W-608, The National Provisioner, 407 S. Dearborn St., Chicago.

Supt.-Gen. Foreman

Superintendent, general foreman, 32 years old, desires position with medium or small house. Understands killing, cutting, curing, sausage and mechanical end. Now employed. Good reason for changing. Best references. W-628, The National Provisioner, 300 Madison Ave., New York City.

Superintendent

Want position as superintendent. Practical experience covering beef and pork, killing, cutting, curing, etc. Can produce results with least labor cost. Now employed. Want to change for good reason. Will go anywhere. Can furnish references from past and present employers. W-629, The National Provisioner, 407 S. Dearborn St., Chicago.

To Sell Casings and Spices

Want to sell casings and spices on commission. Practical knowledge of business and wide acquaintance among packers and sausage manufacturers. W-633, The National Provisioner, 407 S. Dearborn St., Chicago, Ill.

Do You Plan to Make Dog Food?

If so, you need the right advice to keep out of trouble. Expert with practical experience can establish formulas and methods and start production for you. W-620, THE NATIONAL PROVISIONER, 407 S. Dearborn St., Chicago.

Business Opportunities

Beef Boning Facilities

Excellent facilities for beef boning activities, including refrigeration, heat, light, and office space, adjacent to packinghouse branches in city of Minneapolis, Minnesota. Reasonable rental. Worthwhile opportunity for live concern. Welcome inspection. FS-627, The National Provisioner, 407 S. Dearborn St., Chicago.

Here is a page of opportunities.
Take advantage of them.

Arbogast & Bastian Company

MEAT PACKERS and PROVISION DEALERS

WHOLESALE SLAUGHTERERS OF

CATTLE, HOGS, SHEEP AND CALVES

U. S. GOVERNMENT INSPECTION ALLENTOWN, PA.

Men Wanted

Casing Salesman

Wanted, sausage casing salesman. One familiar with trade in New York, New Jersey, Connecticut and Pennsylvania. W-630, THE NATIONAL PROVISIONER, 300 Madison Ave., New York City.

Salesmen

Experienced packinghouse salesmen calling on retail meat trade to carry small meat tenderer for side line. Big seller and good profits. Price right to sell. Full details sent on receipt of your inquiry. W-631, The National Provisioner, 300 Madison Ave., New York City.

General Plant Manager

Wanted, general plant manager for well-known concern. Must be man who understands and can supervise pork and beef operations, processing and merchandising, including sausage. Include full information with application. W-632, The National Provisioner, 407 S. Dearborn St., Chicago, Ill.

Packinghouse Superintendent

Wanted, superintendent thoroughly versed in all departments, fully able to handle men, who understands yields and costs. Give full details of experience. W-614, THE NATIONAL PROVISIONER, 407 S. Dearborn St., Chicago.

Cattle Butcher

Wanted, reliable, all-around cattle butcher, good splitter. Work in the East. References required, also age and wages expected. W-623, THE NATIONAL PROVISIONER, 300 Madison Ave., New York City.

Equipment Wanted

Steam Jacketed Kettle

Wanted, 100- or 125-gallon steam jacketed kettle. Must be in good condition and pass inspection. Send particulars and price to H. J. Ehms, 10831 Shoemaker Ave., Detroit, Mich.

Equipment for Sale

Victor Ice Crusher

For sale, No. 3 Victor ice crusher, belt-driven, 12-ton per hour capacity. For price and details apply to G. C. Pool, Armour and Company, U. S. Yards, Chicago.

Packinghouse Machinery

For sale, reconditioned machinery of every description from single machine to machinery for complete packing plant. Guaranteed in A-1 condition. Write Menges, Mange, Inc., 1515 N. Grand Blvd., St. Louis, Mo.

Rendering Equipment

For sale, 10 Rotary Steam Tube Dryers, 6'x20' long, each with 37-4" tubes. Complete Hydro-generated Oil Plant. Send for circulars Rating Grinders, Meeters, Lard Rolls, Filter Presses, Cookers, Cutters, Meat Mixers, Hammer Mills, Digestors, Kettles, etc. What idle machinery have you for sale?

CONSOLIDATED PRODUCTS CO., INC.
14-19 Park Row, New York City.

Sausage Machinery for Sale

No. 43 silent cutter and motor
No. 27 silent cutter and motor
1000-lb. mixer
700-lb. mixer
400-lb. mixer
No. 56 grinder and motor
No. 56 pulley grinder
No. 41 grinder and motor
400-lb. stuffer
200-lb. stuffer
100-lb. stuffer
200-gallon steam jacketed kettle

Thoroughly overhauled, perfect condition. FS-624, The National Provisioner, 407 S. Dearborn St., Chicago, Ill.

GEO. H. JACKLE

Broker

Tankage, Blood, Bones
Cracklings, Bonemeal
Hoof and Horn Meal

Chrysler Bldg.,
405 Lexington Ave.
New York City

THE CUDAHY PACKING CO.

Importers and Exporters of

Selected Sausage Casings

221 North La Salle Street

Chicago, U. S. A.



Famous Brands are built on quality



14 Plants
Strategically Located

HONEY BRAND Hams — Bacon

Spiced Ham

Pork

Beef

Veal

Lamb

Luncheon Meat

Sausage Specialties

Hygrade Food Products Corporation

3830 S. Morgan St., Chicago, Ill.



Philadelphia Scrapple a Specialty

John J. Felin & Co., Inc.

4142-60 Germantown Ave., Philadelphia, Pa.

New York Branch: 407-409 West 13th Street

Hams
Bacon
Lard
Delicatessen

The Columbus Packing Company



Pork and Beef Packers

Columbus, Ohio

Schenk Bros., Managers

New York Office: 410 W. 14th St.

foods of Unmatched Quality

ESSKAY
QUALITY

HAMS—BACON

LARD—SAUSAGE

SOUTHERN ROSE SHORTENING

The Wm. Schluderberg-T. J. Kurde Co.
Meat Packers

Baltimore, Md.



ALBANY PACKING CO. INC.
ALBANY, N.Y.



**Liberty
Bell Brand**

Hams—Bacon—Sausages—Lard—Scrapple
E. G. VOGT & SONS, INC.—PHILADELPHIA, PA.

C. A. Durr Packing Co., Inc.

Utica, N. Y.
Manufacturers of



HAMS
BACON
FRANKFURTS
QUALITY Pork Products That SATISFY

LARD
DAISIES
SAUSAGES

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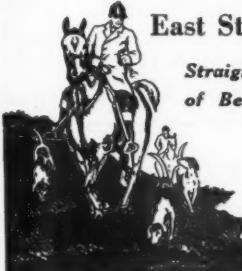
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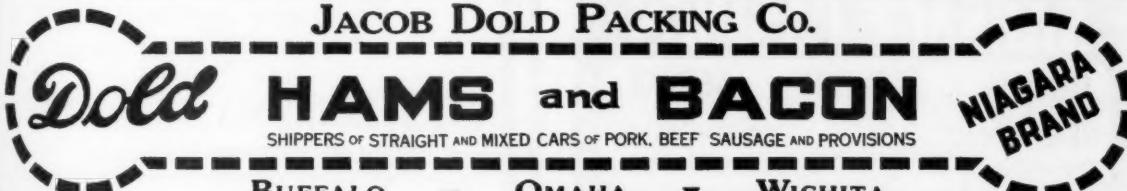
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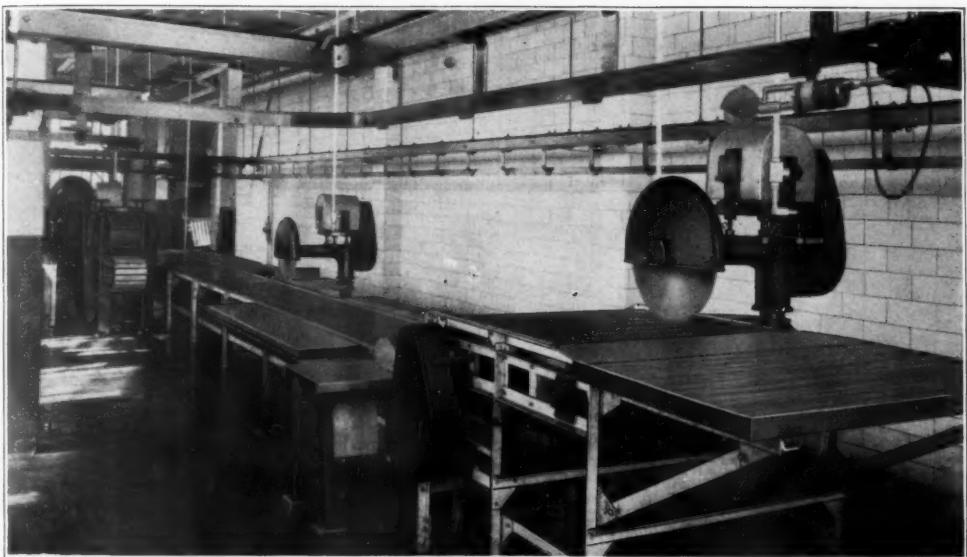
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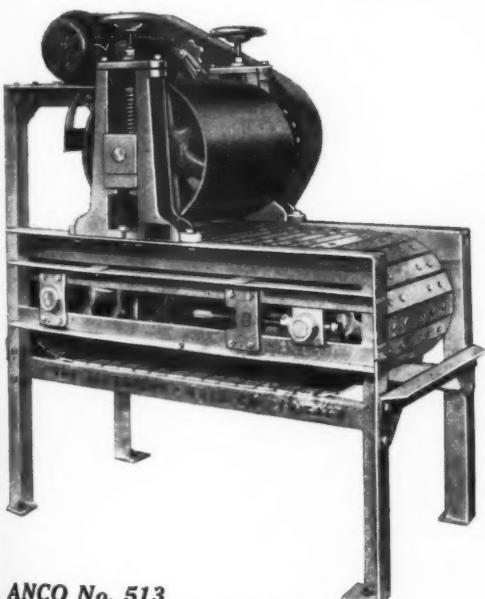
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